CHICAGO DEPARTMENT OF TRANSPORTATION

CITY OF CHICAGO

December 3, 2013

Northeastern Illinois Regulatory Programs Section
Illinois Department of Natural Resources
Office of Water Resources, Region 2 Office
2050 W. Stearns Road
Bartlett, Illinois 60103

RE: **Joint Application Form**
Lake Front Trail Improvement – Jane Adams Park to Ogden Slip
CDOT Project No. E-0-534

Dear Ms. Chernich:

The Chicago Department of Transportation (CDOT) is submitting the attached Joint Application Form (NCR Form 426) for review and approval by your office. The permit is being submitted for the proposed shared use trail to the Lakefront Trail improvements. The scope of this project consists of constructing a new elevated bicycle/pedestrian structure through DuSable Park that will connect the Ogden Slip to the Lake Shore Drive bascule bridge over the Main Branch of the Chicago River located in the City of Chicago, Cook County, Illinois, Mile 0.32 (41.8893N, 87.6143 W), as shown on the attached location map. This single crossing will span over the Ogden Slip adjacent and parallel to the east side of intermediate Lake Shore Drive.

The new structure consists of a 17-foot wide deck supported by a steel superstructure frame consisting of a single longitudinal steel pipe and transverse steel beams spaced about 8-foot on center. The steel pipe is supported by built-up steel columns attached to concrete foundations atop steel H-piles. The south end of the elevated path near the Chicago River Bridge house will end at a cantilevered concrete abutment founded on a 12' long by 20' wide concrete cap supported by steel H-piles driven within the DuSable Park limits. An additional five (5) steel columns will be placed along DuSable Park and founded on a 14' long by 14' wide concrete cap supported by steel H-piles with the exception of Bent 7 which is the bent closest located to the park north seawall. Bent 7 will be supported by micropiles that are used to minimize vibration impacts to the existing seawall that may arise from standard H-pile driving operations.

Bent 6 will be a concrete pier column to be located on the north side of Ogden Slip adjacent to the edge of the existing seawall. Bent 6 will be founded on a 9' long by 20' wide concrete cap supported by micropiles. Repairs to the existing seawall will be needed near this location due to the close proximity of the proposed foundation in combination with the poor condition of the seawall. It is proposed that at this location a new segment of seawall be installed 2' beyond the existing seawall anchored by tiebacks. The repairs to the existing seawall will likely require the use of a barge to transport and install the new segments of seawall along bent 6.

The elevated path will span over Ogden Slip and the bottom of steel for the proposed structure will provide a vertical clearance greater than 14'-4". Additionally, the bottom of steel for the proposed

structure is set to be above the bottom of steel for the adjacent existing Lake Shore Drive ramp. Navigation lights will be installed on the east side of the proposed structure to comply with US Coast Guard requirements.

It is anticipated that the impact to the Ogden Slip will be minimal and less than 0.25 acres. There will be no discharge or dredging to the existing waters. The piers for the proposed elevated path will be set on existing ground and there will be no impediment or alteration to the Ogden Slip water flow. Therefore, a National Pollutant Discharge Elimination System (NPDES) Construction Permit is not required.

We are requesting authorization under Regional Permit Program for RP3 – Transportation Projects, for the new proposed shared pedestrian/bicycle path; and RP9 – Maintenance, for the repair of the existing seawall north of Ogden slip near bent 7. All terms and conditions of the Regional Permit Program will be followed.

Enclosed for your review and further processing are the following:

- Section 404 Joint Application Form (NCR Form 426)
- Attachment 1:
    - Sheet 1: Vicinity Map, Location Map
    - Sheet 2: General Plan
- Attachment 2:
    - Sheet 1: Preliminary Plan
    - Sheet 2: Preliminary Cross Section
- Attachment 3: Site Photographs
- Attachment 4: Endangered Species Act compliance – Section 7

A copy of this Section 404 Joint Application will be submitted to the Illinois Department of Natural Resources, Office of Water Resources (IDNT/OWR) and the Illinois Environmental Protection Agency (IEPA).

Should you have any questions or comments please feel free to contact the Project manager, Dolan McMillan at (312) 744-5806.

Sincerely,

Luann Hamilton
Deputy Commissioner
Division of Project Development

LH/JA/DM

CHICAGO DEPARTMENT OF TRANSPORTATION

CITY OF CHICAGO

December 3, 2013

Illinois Environmental Protection Agency
Division of Water Pollution Control
Permit Section #15
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276

RE: **Joint Application Form**
Lake Front Trail Improvement – Jane Adams Park to Ogden Slip
CDOT Project No. E-0-534

Dear Ms. Chernich:

The Chicago Department of Transportation (CDOT) is submitting the attached Joint Application Form (NCR Form 426) for review and approval by your office. The permit is being submitted for the proposed shared use trail to the Lakefront Trail improvements. The scope of this project consists of constructing a new elevated bicycle/pedestrian structure through DuSable Park that will connect the Ogden Slip to the Lake Shore Drive bascule bridge over the Main Branch of the Chicago River located in the City of Chicago, Cook County, Illinois, Mile 0.32 (41.8893N, 87.6143 W), as shown on the attached location map. This single crossing will span over the Ogden Slip adjacent and parallel to the east side of intermediate Lake Shore Drive.

The new structure consists of a 17-foot wide deck supported by a steel superstructure frame consisting of a single longitudinal steel pipe and transverse steel beams spaced about 8-foot on center. The steel pipe is supported by built-up steel columns attached to concrete foundations atop steel H-piles. The south end of the elevated path near the Chicago River Bridge house will end at a cantilevered concrete abutment founded on a 12' long by 20' wide concrete cap supported by steel H-piles driven within the DuSable Park limits. An additional five (5) steel columns will be placed along DuSable Park and founded on a 14' long by 14' wide concrete cap supported by steel H-piles with the exception of Bent 7 which is the bent closest located to the park north seawall. Bent 7 will be supported by micropiles that are used to minimize vibration impacts to the existing seawall that may arise from standard H-pile driving operations.

Bent 6 will be a concrete pier column to be located on the north side of Ogden Slip adjacent to the edge of the existing seawall. Bent 6 will be founded on a 9' long by 20' wide concrete cap supported by micropiles. Repairs to the existing seawall will be needed near this location due to the close proximity of the proposed foundation in combination with the poor condition of the seawall. It is proposed that at this location a new segment of seawall be installed 2' beyond the existing seawall anchored by tiebacks. The repairs to the existing seawall will likely require the use of a barge to transport and install the new segments of seawall along bent 6.

The elevated path will span over Ogden Slip and the bottom of steel for the proposed structure will provide a vertical clearance greater than 14'-4". Additionally, the bottom of steel for the proposed

structure is set to be above the bottom of steel for the adjacent existing Lake Shore Drive ramp. Navigation lights will be installed on the east side of the proposed structure to comply with US Coast Guard requirements.

It is anticipated that the impact to the Ogden Slip will be minimal and less than 0.25 acres. There will be no discharge or dredging to the existing waters. The piers for the proposed elevated path will be set on existing ground and there will be no impediment or alteration to the Ogden Slip water flow. Therefore, a National Pollutant Discharge Elimination System (NPDES) Construction Permit is not required.

We are requesting authorization under Regional Permit Program for RP3 – Transportation Projects, for the new proposed shared pedestrian/bicycle path; and RP9 – Maintenance, for the repair of the existing seawall north of Ogden slip near bent 7. All terms and conditions of the Regional Permit Program will be followed.

Enclosed for your review and further processing are the following:

- Section 404 Joint Application Form (NCR Form 426)
- Attachment 1:
    - Sheet 1: Vicinity Map, Location Map
    - Sheet 2: General Plan
- Attachment 2:
    - Sheet 1: Preliminary Plan
    - Sheet 2: Preliminary Cross Section
- Attachment 3: Site Photographs
- Attachment 4: Endangered Species Act compliance – Section 7

A copy of this Section 404 Joint Application will be submitted to the Illinois Department of Natural Resources, Office of Water Resources (IDNT/OWR) and the Illinois Environmental Protection Agency (IEPA).

Should you have any questions or comments please feel free to contact the Project manager, Dolan McMillan at (312) 744-5806.

Sincerely,

Luann Hamilton
Deputy Commissioner
Division of Project Development

LH/JA/DM

CHICAGO DEPARTMENT OF TRANSPORTATION

CITY OF CHICAGO

December 3, 2013

Ms. Kathleen G. Chernich
Chief, East Section
Regulatory Branch
U.S. Army Corps of Engineers
231 South LaSalle Street, Suite 1500
Chicago, Illinois 60604-1426

Attn: Michael J. Murphy

RE: **Joint Application Form**
Lake Front Trail Improvement – Jane Adams Park to Ogden Slip
CDOT Project No. E-0-534

Dear Ms. Chernich:

The Chicago Department of Transportation (CDOT) is submitting the attached Joint Application Form (NCR Form 426) for review and approval by your office. The permit is being submitted for the proposed shared use trail to the Lakefront Trail improvements. The scope of this project consists of constructing a new elevated bicycle/pedestrian structure through DuSable Park that will connect the Ogden Slip to the Lake Shore Drive bascule bridge over the Main Branch of the Chicago River located in the City of Chicago, Cook County, Illinois, Mile 0.32 (41.8893N, 87.6143 W), as shown on the attached location map. This single crossing will span over the Ogden Slip adjacent and parallel to the east side of intermediate Lake Shore Drive.

The new structure consists of a 17-foot wide deck supported by a steel superstructure frame consisting of a single longitudinal steel pipe and transverse steel beams spaced about 8-foot on center. The steel pipe is supported by built-up steel columns attached to concrete foundations atop steel H-piles. The south end of the elevated path near the Chicago River Bridge house will end at a cantilevered concrete abutment founded on a 12' long by 20' wide concrete cap supported by steel H-piles driven within the DuSable Park limits. An additional five (5) steel columns will be placed along DuSable Park and founded on a 14' long by 14' wide concrete cap supported by steel H-piles with the exception of Bent 7 which is the bent closest located to the park north seawall. Bent 7 will be supported by micropiles that are used to minimize vibration impacts to the existing seawall that may arise from standard H-pile driving operations.

Bent 6 will be a concrete pier column to be located on the north side of Ogden Slip adjacent to the edge of the existing seawall. Bent 6 will be founded on a 9' long by 20' wide concrete cap supported by micropiles. Repairs to the existing seawall will be needed near this location due to the close proximity of the proposed foundation in combination with the poor condition of the seawall. It is proposed that at this location a new segment of seawall be installed 2' beyond the existing seawall anchored by tiebacks. The repairs to the existing seawall will likely require the use of a barge to transport and install the new segments of seawall along bent 6.

The elevated path will span over Ogden Slip and the bottom of steel for the proposed structure will provide a vertical clearance greater than 14'-4". Additionally, the bottom of steel for the proposed structure is set to be above the bottom of steel for the adjacent existing Lake Shore Drive ramp. Navigation lights will be installed on the east side of the proposed structure to comply with US Coast Guard requirements.

It is anticipated that the impact to the Ogden Slip will be minimal and less than 0.25 acres. There will be no discharge or dredging to the existing waters. The piers for the proposed elevated path will be set on existing ground and there will be no impediment or alteration to the Ogden Slip water flow. Therefore, a National Pollutant Discharge Elimination System (NPDES) Construction Permit is not required.

We are requesting authorization under Regional Permit Program for RP3 – Transportation Projects, for the new proposed shared pedestrian/bicycle path; and RP9 – Maintenance, for the repair of the existing seawall north of Ogden slip near bent 7. All terms and conditions of the Regional Permit Program will be followed.

Enclosed for your review and further processing are the following:

- Section 404 Joint Application Form (NCR Form 426)
- Attachment 1:
    - Sheet 1: Vicinity Map, Location Map
    - Sheet 2: General Plan
- Attachment 2:
    - Sheet 1: Preliminary Plan
    - Sheet 2: Preliminary Cross Section
- Attachment 3: Site Photographs
- Attachment 4: Endangered Species Act compliance – Section 7

A copy of this Section 404 Joint Application will be submitted to the Illinois Department of Natural Resources, Office of Water Resources (IDNT/OWR) and the Illinois Environmental Protection Agency (IEPA).

Should you have any questions or comments please feel free to contact the Project manager, Dolan McMillan at (312) 744-5806.

Sincerely,

Luann Hamilton

Luann Hamilton
Deputy Commissioner
Division of Project Development

LH/JA/DM

Navy Pier Flyover Joint Permit Application for DuSable

Marco Loureiro [MLoureiro@HNTB.com]

Sent: Tuesday, November 26, 2013 11:41 AM
To: McMillan, Dolan
Attachments: JointPermit_AppForm_112613.pdf (4 MB) ; USACE Letter 112613.docx (109 KB) ; IDNR Letter 112613.docx (109 KB) ; IEPA Letter 112613.docx (109 KB)

Dolan,
Please find attached the final joint permit application package.
We need to do the following to finalize this package:

1) Print and sign the word file documents
2) Print and sign the Joint Permit form (sheet 2 of the attached pdf)
3) Attache the signed letters to the front of attached pdf package and submit. Each agency will require a full package.

After you get the signatures please send it back to me so I can cut a CD for submittal

Let me know if you have any questions

Thanks
Marco

This e-mail and any files transmitted with it are confidential and are intended solely for the use of the individual or entity to whom they are addressed. If you are NOT the intended recipient and receive this communication, please delete this message and any attachments. Thank you.

JOINT APPLICATION FORM FOR ILLINOIS

ITEMS 1 AND 2 FOR AGENCY USE

1. Application Number	2. Date Received

3. and 4. (SEE SPECIAL INSTRUCTIONS) NAME, MAILING ADDRESS AND TELEPHONE NUMBERS

3a. Applicant's Name:	3b. Co-Applicant/Property Owner Name (if needed or if different from applicant):	4. Authorized Agent (an agent is not required):
Luann Hamilton, Deputy Commissioner	Robert Foster	Marco Loureiro
Company Name (if any) : Chicago Department of Transportation	Company Name (if any): Chicago Park District	Company Name (if any): HNTB
Address: 30 North La Salle Street Suite 500 Chicago, IL 60602	Address: 541 North Fairbanks Court Chicago, IL 60611	Address: One South Wacker Drive, Suite 900 Chicago, IL 60606
Email Address: luann.hamilton@cityofchicago.org	Email Address: robert.foster@chicagoparkdistrict.com	Email Address: MLoureiro@HNTB.com
Applicant's Phone Nos. w/area code Business: (312) 744-1987 Residence: Cell: Fax:	Applicant's Phone Nos. w/area code Business: (312) 742-4287 Residence: Cell: Fax:	Agent's Phone Nos. w/area code Business: (312) 930-9119 Residence: Cell: Fax: (312) 930-9063

STATEMENT OF AUTHORIZATION

I hereby authorize, _____ to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application.

_____ Applicant's Signature

_____ Date

5. ADJOINING PROPERTY OWNERS (Upstream and Downstream of the water body and within Visual Reach of Project)

Name	Mailing Address	Phone No. w/area code
a. Metropolitan Pier & Exposition Authority	301 East Cermak Road - Chicago, IL 60616	312-791-7500
b. Chicago Park District	541 North Fairbanks, Chicago, IL 60611	312-742-7529
c.		
d.		

6. PROJECT TITLE:

Lakefront Improvement Bicycle and Pedestrian Trail, Bridge over DuSable Park and the Ogden Slip to Navy Pier, Chicago, IL 60611

7. PROJECT LOCATION:

LATITUDE: 44.00000 °N LONGITUDE: 88.00000 °W	UTMs Northing: Easting:

STREET, ROAD, OR OTHER DESCRIPTIVE LOCATION	LEGAL DESCRIPT	QUARTER	SECTION	TOWNSHIP NO.	RANGE
401 North Lake Shore Drive - DuSable Park			10	39 North	14 E

☒ IN OR ☐ NEAR CITY OF TOWN (check appropriate box) Municipality Name	WATERWAY	RIVER MILE (if applicable)
Chicago	North Branch of the Chicago River	

COUNTY	STATE	ZIP CODE
Cook	IL	60611

Revised 2010

☒ Corps of Engineers ☒ IL Dep't of Natural Resources ☒ IL Environmental Protection Agency ☒ Applicant's Copy

8. PROJECT DESCRIPTION (Include all features):

The new structure consists of a 17-foot wide deck supported b y a steel superstructure frame consisting of a single longitudinal steel pipe and transverse steel beams spaced about 8 foot on center. The steel pipe is supported by built-up steel columns attached to concrete foundations atop steel H-piles.

The plan is for the proposed structure to cross Ogden Slip, traverse across the western edge of DuSable Park, and eventually connect with the northeast bridge tower at the Chicago River.

The proposed improvement also includes a ramp structure that will provide access from the new path to the Navy Pier facility. The new ramp will intersect the proposed main line structure just north of Ogden Slip, and will follow the curve of the existing vehicular structure (Ramp H) from Lake Shore Drive to Illinois Street

Work will be performed under Regional Permit RP3 and RP9

9. PURPOSE AND NEED OF PROJECT:

Chicago's lakefront path is part of a statewide network of trails. The improvement will strengthen the main non-vehicular link between the north side and the downtown core. The Lakefront Flyover offers the opportunity to prevent conflicts at a congested point along the lakefront bike path by separating travel routes for tourists traveling east-west to Navy Pier and North Pier from cyclists and recreational users traveling north-south along the Lakefront Trail. It improves safety for all users by eliminating the at-grade crossings and the dangerous conditions presented by the existing narrow and steep sidewalk between Illinois St and the Chicago River.

COMPLETE THE FOLLOWING FOUR BLOCKS IF DREDGED AND/OR FILL MATERIAL IS TO BE DISCHARGED

10. REASON(S) FOR DISCHARGE:

There is no anticipated discharge of dredged or fill materials.

11. TYPE(S) OF MATERIAL BEING DISCHARGED AND THE AMOUNT OF EACH TYPE IN CUBIC YARDS FOR WATERWAYS:

TYPE:

AMOUNT IN CUBIC YARDS:

12. SURFACE AREA IN ACRES OF WETLANDS OR OTHER WATERS FILLED (See Instructions)

13. DESCRIPTION OF AVOIDANCE, MINIMIZATION AND COMPENSATION (See instructions)

14. Date activity is proposed to commence: October 2015 — Date activity is expected to be completed: October 2017

15. Is any portion of the activity for which authorization is sought now complete? Yes [ ] No [X] NOTE: If answer is "YES" give reasons in the Project Description and Remarks section. Indicate the existing work on drawings.
Month and Year the activity was completed

16. List all approvals or certification and denials received from other Federal, interstate, state, or local agencies for structures, construction, discharges or other activities described in this application. None

Issuing Agency	Type of Approval	Identification No.	Date of Application	Date of Approval	Date of Denial
City of Chicago	PHarbor, traffic, and construction permits	TBD	Prior to construction		

17. CONSENT TO ENTER PROPERTY LISTED IN PART 7 ABOVE IS HEREBY GRANTED. Yes [X] No

18. APPLICATION VERIFICATION (SEE SPECIAL INSTRUCTIONS)

Application is hereby made for the activities described herein. I certify that I am familiar with the information contained in the application, and that to the best of my knowledge and belief, such information is true, complete, and accurate. I further certify that I possess the authority to undertake the proposed activities.

Signature of Applicant or Authorized Agent — Date: 12-3-13

Signature of Applicant or Authorized Agent — Date

Signature of Applicant or Authorized Agent — Date

[X] Corps of Engineers Revised 2010 [X] IL Dep't of Natural Resources [X] IL Environmental Protection Agency [X] Applicant's Copy

SEE INSTRUCTIONS FOR ADDRESS

LOCATION MAP

See Attachment

Revised 2010

☒ Corps of Engineers ☒ IL Dep't of Natural Resources ☒ IL Environmental Protection Agency ☒ Applicant's Copy

PLAN VIEW

See Attachment

FOR AGENCY USE ONLY

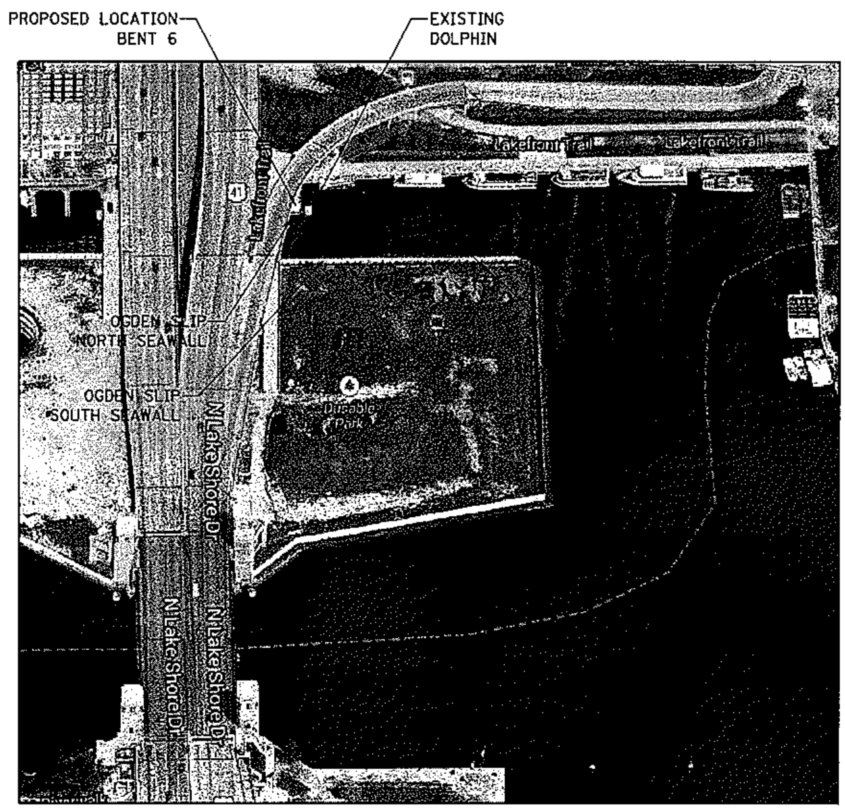
Revised 2010

☒ Corps of Engineers ☒ IL Dep't of Natural Resources ☒ IL Environmental Protection Agency ☒ Applicant's Copy

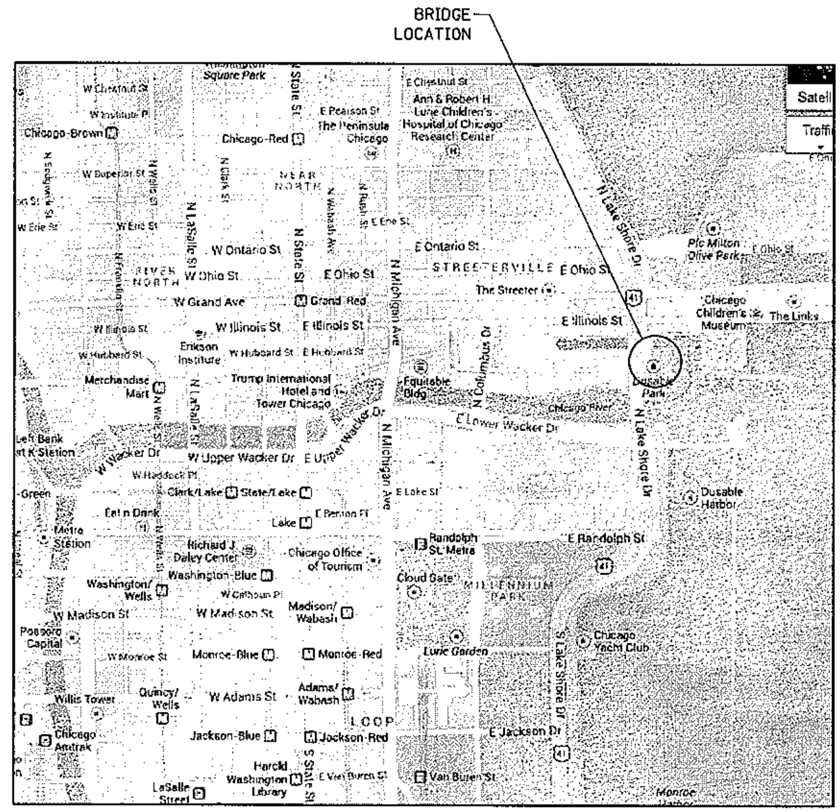
Attachment 1

Sheet 1: Vicinity Map, Location Map

Sheet 2: General Plan



LOCATION MAP



VICINITY MAP

PROPOSED ELEVATED PEDESTRIAN PATH BRIDGE

LAKEFRONT TRAIL IMPROVEMENT FROM CHICAGO RIVER BRIDGE TO OGDEN SLIP COOK COUNTY, CHICAGO ILLINOIS APPLICATION BY THE CHICAGO DEPARTMENT OF TRANSPORTATION NOVEMBER 2013

VICINITY AND LOCATION MAP

11/15/2013	SHEET 1 OF 2

N

PROPOSED ELEVATED PEDESTRIAN PATH BRIDGE

LAKEFRONT TRAIL IMPROVEMENT FROM CHICAGO RIVER BRIDGE TO OGDEN SLIP
COOK COUNTY, CHICAGO ILLINOIS
APPLICATION BY THE CHICAGO DEPARTMENT OF TRANSPORTATION
NOVEMBER 2013

BRIDGE ALIGNMENT

11/15/2013	SHEET 2 OF 2

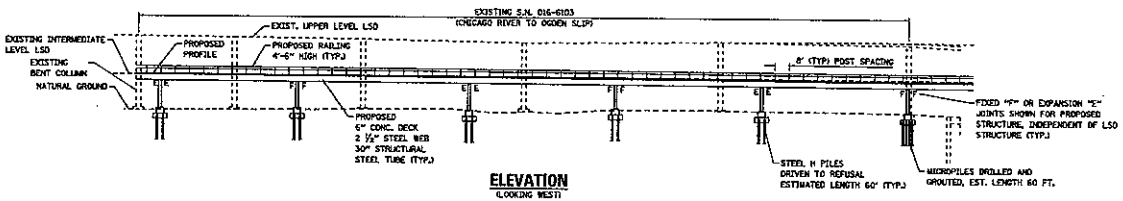
Attachment 2

Sheets 1 & 2: Preliminary Plans

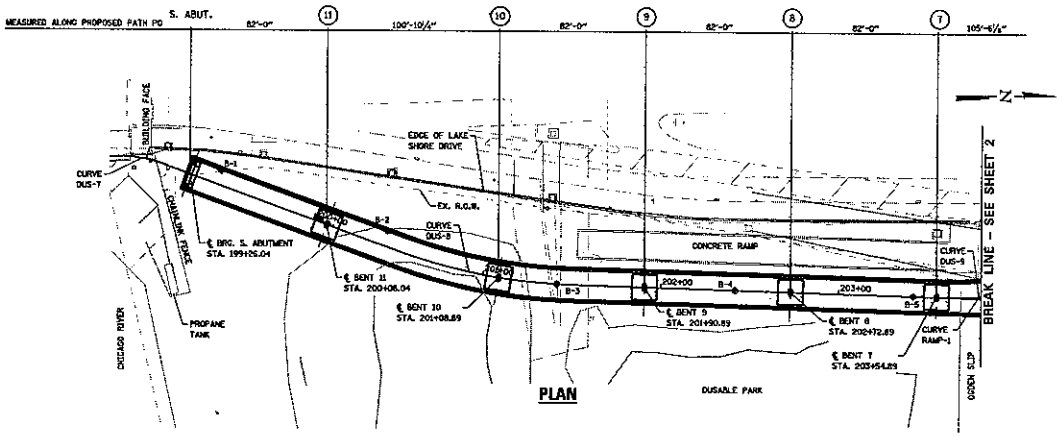
Sheets 3 through 6: Preliminary Cross Sections & Details

BENCHMARK: CITY OF CHICAGO BENCH MONUMENT "9 LOCATED 4' E. OF EAST LINE OF MICHIGAN AVENUE AND 19' SOUTH OF NORTH LINE OF RICE STREET. ELEV. 12.905.

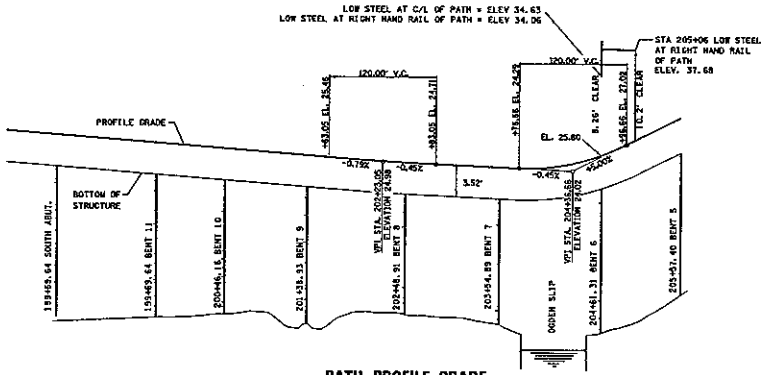
EXISTING STRUCTURES: 016-6103 - A FIVE SPAN CONTINUOUS STEEL STRINGER STRUCTURE CARRYING TWO LEVELS OF TRAFFIC WITH AN OVERALL LENGTH OF 432 FT. AND A WIDTH OF 214 FT. THE SUPERSTRUCTURE IS SUPPORTED ON STEEL PIER BENTS.
016-6104 - A TWO SPAN CONTINUOUS ROLLED STRINGER STRUCTURE CARRYING THREE LEVELS OF TRAFFIC WITH AN OVERALL LENGTH OF 202 FT. AND A WIDTH OF 250 FT. THE SUPERSTRUCTURE IS SUPPORTED ON STEEL PIER BENTS AND A REINFORCED CONCRETE ABUTMENT.
016-6106 - LAKE SHORE DRIVE NORTHBOUND EXIT RAMP "M" TO ILLINOIS AVENUE. A THREE SPAN CURVED STEEL STRINGER STRUCTURE. SPANS 1 AND 2 ARE CONTINUOUS UP TO PIER 3. SPAN 3 IS CONTINUOUS WITH THE ADJACENT STRUCTURE (016-6104). THE SUPERSTRUCTURE IS SUPPORTED ON REINFORCED CONCRETE SOLID WALL PIERS AND A CONCRETE ABUTMENT. THE STRUCTURE HAS AN OVERALL LENGTH OF 252 FT. AND A WIDTH OF 23 FT.



ELEVATION
LOOKING WEST



PLAN



PATH PROFILE GRADE
ALONG PATH PG

DESIGN SPECIFICATIONS

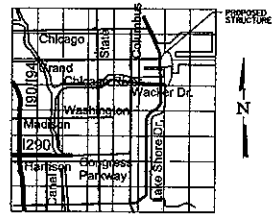
ALL MATERIAL AND WORKMANSHIP SHALL CONFORM TO THE FOLLOWING STANDARDS:
AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 2002 17th EDITION
AASHTO GUIDE SPECIFICATIONS FOR THE DESIGN OF PEDESTRIAN BRIDGES, 1997
AWS D1.5 AND D1.1 BRIDGE WELDING CODE
ILLINOIS DEPARTMENT OF TRANSPORTATION BRIDGE MANUAL, 2003

DESIGN CRITERIA

LIVE LOAD:	100 PSF PEDESTRIAN H-10, NOT IN CONCURRENCE WITH PEDESTRIAN
IMPACT:	NOT APPLICABLE
WIND LOAD:	50 PSF LATERAL, 20 PSF UPLIFT
THERMAL:	+/- 80 DEGREES F (-30 DEGREES F TO +130 DEGREES F)
SEISMIC:	ACCELERATION A = 0.038 g SITE COEFFICIENT S = 1.2 SEISMIC PERFORMANCE CATEGORY A
DEFLECTION:	SPAN LENGTH / 500 MAINLINE, SPAN LENGTH / 300 CANTILEVERS
FATIGUE:	100,000 CYCLES WIND

DESIGN STRESSES

REINFORCED CONCRETE:
f'c = 4000 PSI (BRIDGE DECK AND ABUTMENT DIAPHRAGMS)
f'c = 3500 PSI (PILE CAPS, PEDESTALS, PIERS, AND FOOTINGS)
f'c = 3500 PSI (ALL OTHERS)
REINFORCEMENT BARS:
Fy = 60,000 PSI (AASHTO M31, M42, OR M53, GRADE 60)
STRUCTURAL STEEL:
Fy = 50,000 PSI (AASHTO M270, GRADE 50)
Fy = 36,000 PSI (AASHTO M270, GRADE 36)
Fy = 52,000 PSI (APISL X52)



LOCATION SKETCH

LEGEND

- (11) PROPOSED PIER NUMBER
- ◆ SOIL BORING LOCATION SHOWN THUS: B-2
- ▮ PROPOSED COLUMN

NOTES:
1. FOR HORIZONTAL CURVE DATA, SEE SHEET 2 OF 6.
2. FOR TYPICAL COLUMNS AT BENTS, SEE SHEET 5 OF 6.

NO.	BY	DATE	DESCRIPTION

LAKEFRONT TRAIL IMPROVEMENT FROM CHICAGO RIVER BRIDGE TO OGDEN SLIP

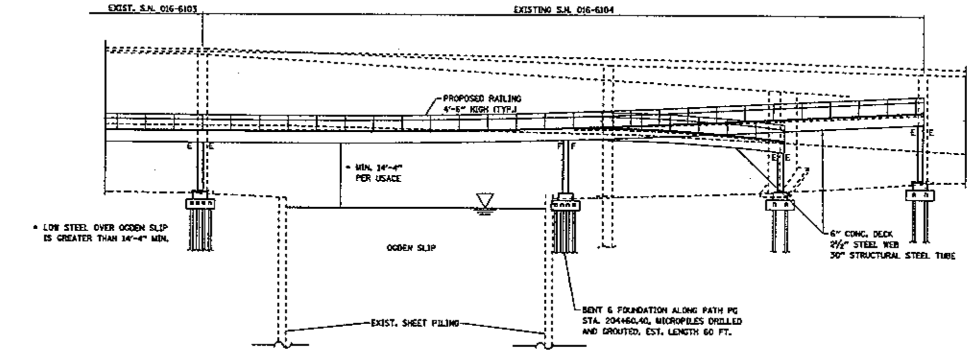
GENERAL PLAN, ELEVATION AND PROFILE (SHEET 1 OF 2)

CONSULTANT: HNTB

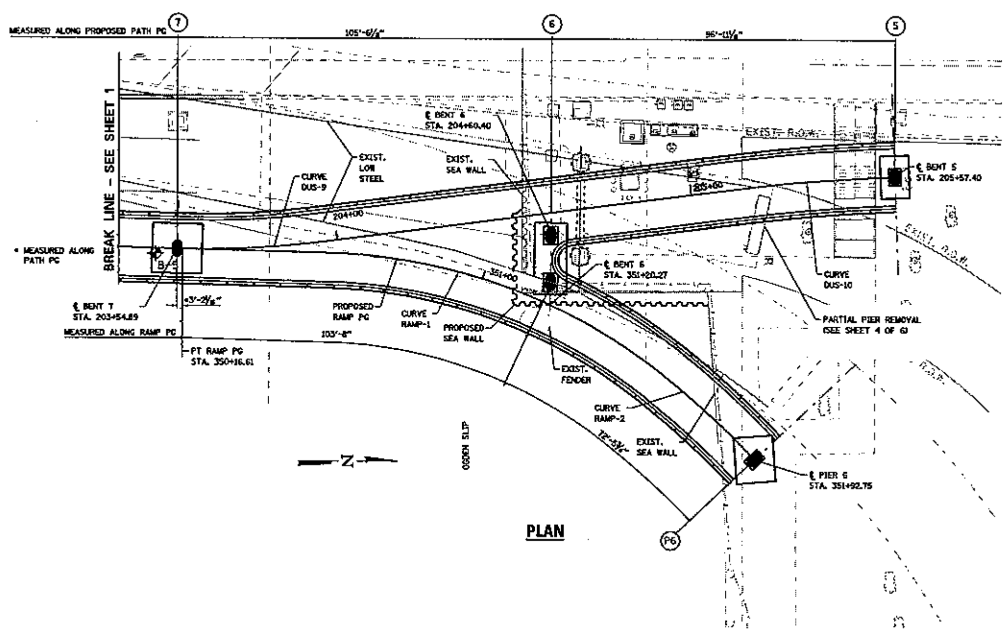
CITY OF CHICAGO

DEPARTMENT OF TRANSPORTATION
BUREAU OF BRIDGES & TRANSIT

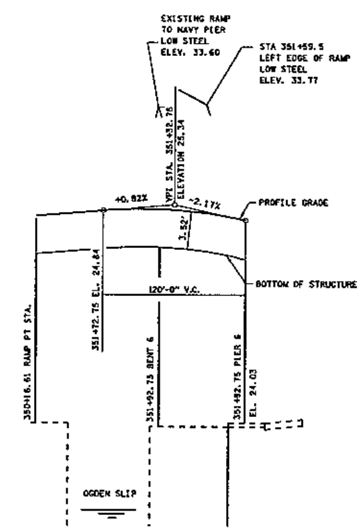
DRAWN:	RCW
CHECKED:	ML
APPROVED:	ML
DATE:	03/25/15
SCALE:	N.T.S
CONTRACT NO.	
SHEET NO.	1 OF 6
PROJECT NO.	44867



ELEVATION
(LOOKING WEST)



PLAN



RAMP PROFILE GRADE
ALONG RAMP PG

NOTES:
1. FOR LEGEND, SEE SHEET 1 OF 6.

PROP. CURVE DUS-8	PROP. CURVE DUS-9	PROP. CURVE DUS-10
PI STA. = 201+00.63	PI STA. = 203+75.69	PI STA. = 205+34.99
Δ = 18° 32' 22" (LT)	Δ = 8° 57' 41" (LT)	Δ = 5° 08' 17" (RT)
D = 19° 05' 55"	D = 25° 27' 53"	D = 11° 27' 33"
R = 300.00'	R = 225.00'	R = 500.00'
T = 48.96'	T = 17.63'	T = 22.43'
L = 97.07'	L = 35.19'	L = 44.84'
E = 3.97'	E = 0.69'	E = 0.50'
e = ____	e = ____	e = ____
T.R. = ____	T.R. = ____	T.R. = ____
S.E. RUN = ____	S.E. RUN = ____	S.E. RUN = ____
P.C. STA. = 200+51.67	P.C. STA. = 203+58.06	P.C. STA. = 205+12.56
P.T. STA. = 201+48.74	P.T. STA. = 203+93.25	P.T. STA. = 205+57.40

HORIZONTAL CURVE DATA
ALONG PATH PG

PROP. CURVE RAMP-1	PROP. CURVE RAMP-2
PI STA. = 351+08.35	PI STA. = 351+74.56
Δ = 36° 30' 26" (RT)	Δ = 8° 21' 15" (RT)
D = 36° 43' 41"	D = 22° 55' 06"
R = 156.00'	R = 250.00'
T = 51.45'	T = 18.26'
L = 99.40'	L = 36.45'
E = 8.27'	E = 0.67'
e = ____	e = ____
T.R. = ____	T.R. = ____
S.E. RUN = ____	S.E. RUN = ____
P.C. STA. = 350+56.90	P.C. STA. = 351+56.30
P.T. STA. = 351+56.30	P.T. STA. = 351+92.75

HORIZONTAL CURVE DATA
ALONG RAMP PG

NO.	BY	DATE	DESCRIPTION

REVISIONS

LAKEFRONT TRAIL IMPROVEMENT FROM CHICAGO RIVER BRIDGE TO OGDEN SLIP

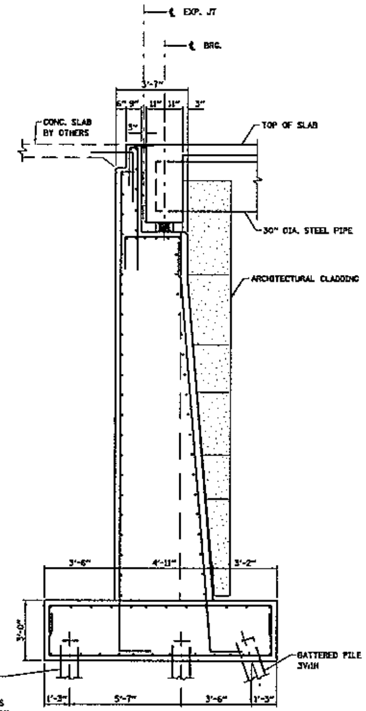
GENERAL PLAN, ELEVATION AND PROFILE (SHEET 2 OF 2)

CONSULTANT: HNTB

CITY OF CHICAGO

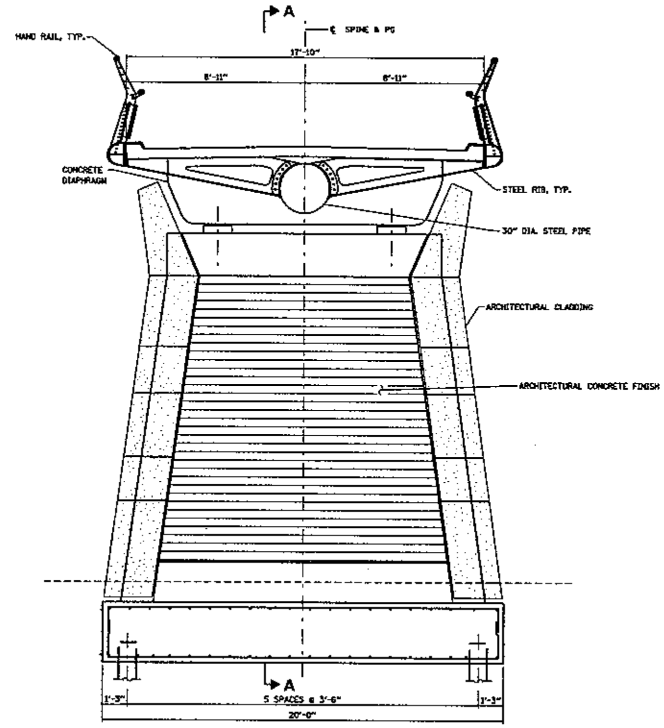
DEPARTMENT OF TRANSPORTATION
BUREAU OF BRIDGES & TRANSIT

DRAWN	RCB	SHEET NO. 2 OF 6
CHECKED	ML	
APPROVED	ML	
DATE	03/25/13	
SCALE	N.T.S	
CONTRACT NO.		PROJECT NO. 44867

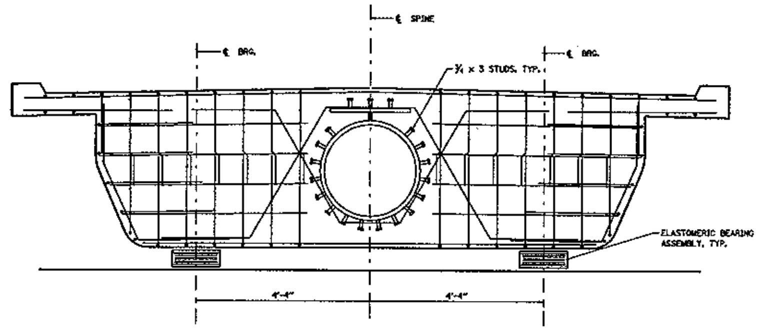


PILE DATA
TYPE - HP10x42
CAPACITY - 50 TONS
EST. LENGTH - 78'-0"
NO. PRODUCTION PILES - 11 VERTICAL
6 BATTERED
NO. TEST PILES - 1 VERTICAL

SECTION A-A



SOUTH ABUTMENT ELEVATION
(LOOKING SOUTH)



CONCRETE DIAPHRAGM DETAILS

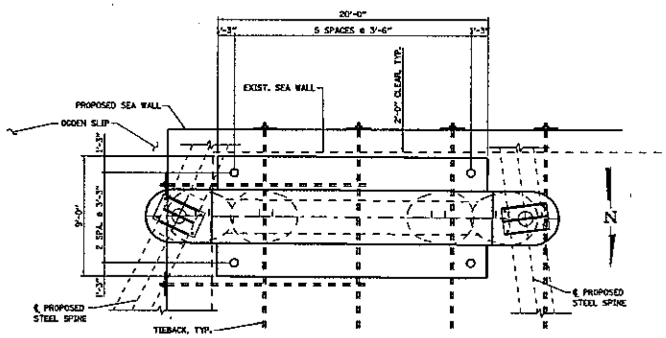
LAKEFRONT TRAIL IMPROVEMENT
FROM CHICAGO RIVER BRIDGE
TO OGDEN SLIP

SOUTH ABUTMENT DETAILS

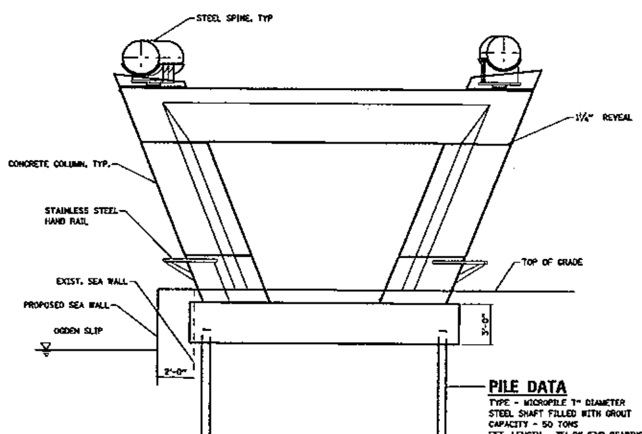
HNTB

CITY OF CHICAGO
DEPARTMENT OF TRANSPORTATION
BUREAU OF BRIDGES & TRANSIT

DRAWN	RCW	SHEET NO.	3 OF 6
CHECKED	ML		
APPROVED	ML		
DATE	03/25/13		
SCALE	N.T.S		
CONTRACT NO.		PROJECT NO.	



PLAN

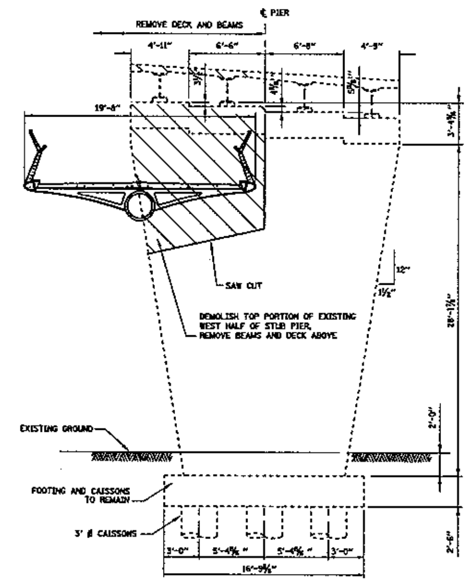


BENT 6 ELEVATION

(LOOKING SOUTH)
(TIEBACKS NOT SHOWN FOR CLARITY)

PILE DATA

TYPE - MICROPILE 7" DIAMETER
STEEL SHAFT FILLED WITH GROUT
CAPACITY - 50 TONS
EST. LENGTH - 75'-0" (END BEARING)
NO. REQUIRED - 16 VERTICAL



CROSS SECTION AT STUB PIER 09M

(LOOKING NORTH)

NO.	BY	DATE	DESCRIPTION

REVISIONS

LAKEFRONT TRAIL IMPROVEMENT
FROM CHICAGO RIVER BRIDGE
TO OGDEN SLIP

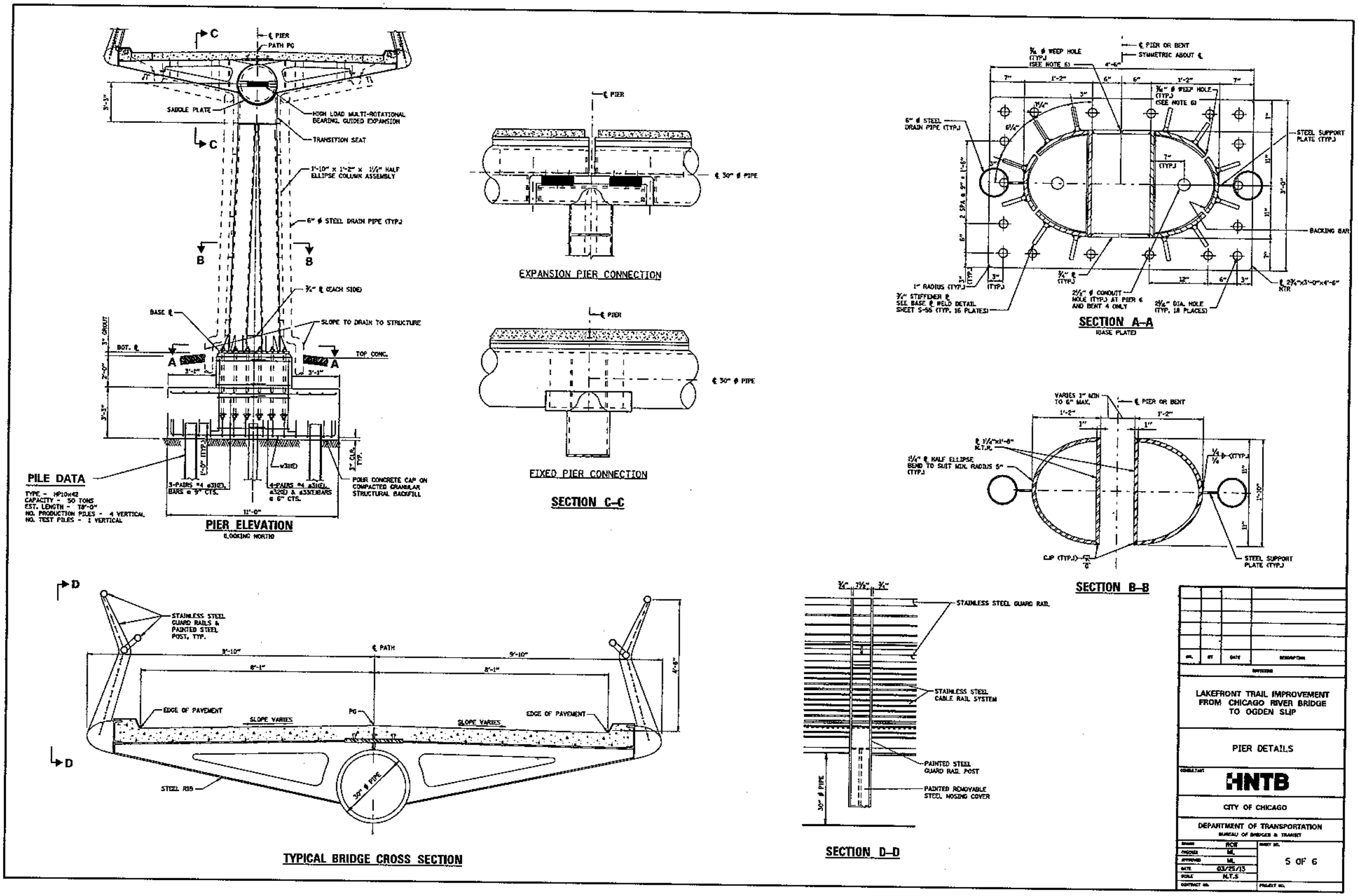
BIFURCATION PIER DETAILS

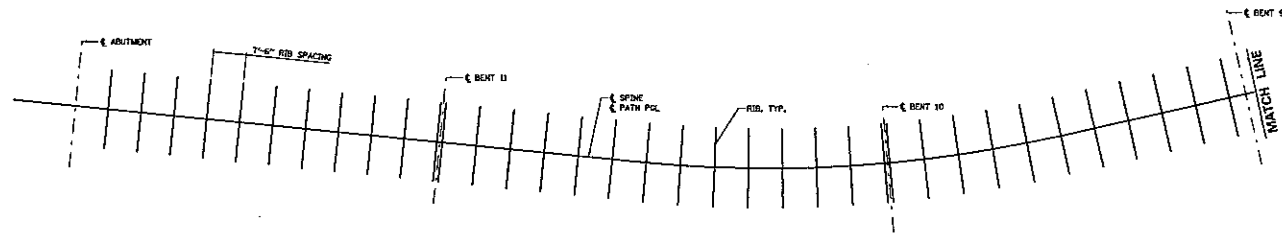
HNTB

CITY OF CHICAGO

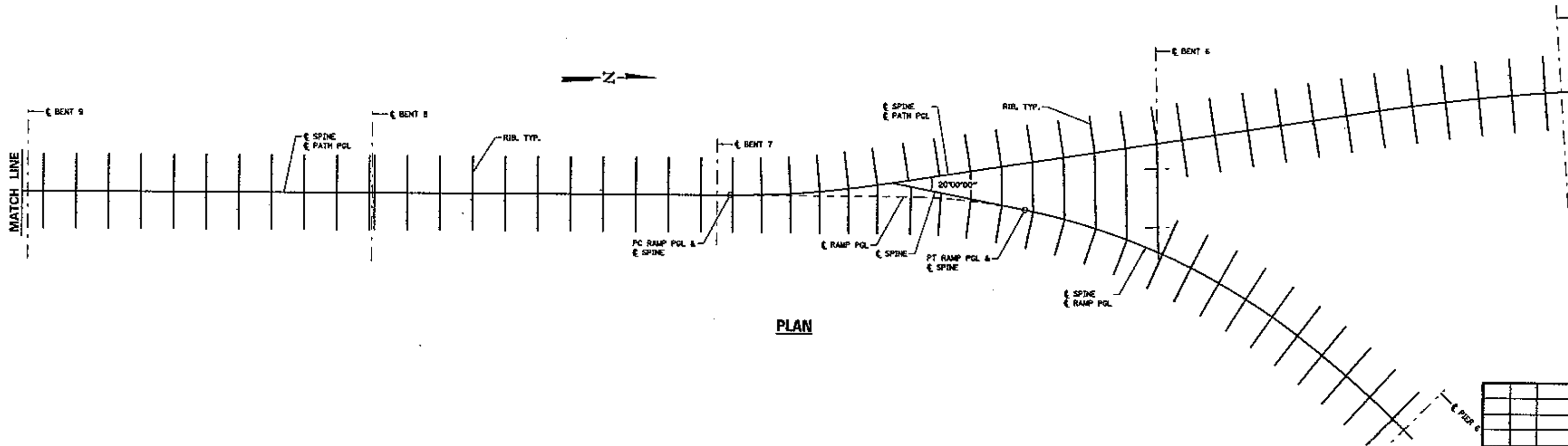
DEPARTMENT OF TRANSPORTATION
BUREAU OF BRIDGES & TRANSIT

DRAWN	RCR	SHEET NO.
CHECKED	ML	4 OF 6
APPROVED	ML	
DATE	03/25/13	
SCALE	N.T.S	
CONTRACT NO.		PROJECT NO.

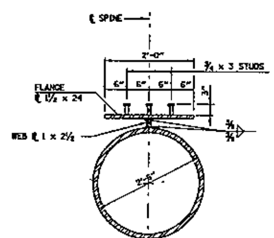

PIER ELEVATION
(LOOKING NORTH)
PILE DATA
TYPE - HP10x42
CAPACITY - 50 TONS
EST. LENGTH - 78'-0"
NO. PRODUCTION PILES - 4 VERTICAL
NO. TEST PILES - 1 VERTICAL
SADDLE PLATE
HIGH LOAD MULTI-ROTATIONAL BEARING, GUIDED EXPANSION
TRANSITION SEAT
1'-10" x 1'-2" x 1½" HALF ELLIPSE COLUMN ASSEMBLY
6" ϕ STEEL DRAIN PIPE (TYP.)
¾" ℄ (EACH SIDE)
SLOPE TO DRAIN TO STRUCTURE
TOP CONC.
BASE ℄
BOT. ℄
POUR CONCRETE CAP ON COMPACTED GRANULAR STRUCTURAL BACKFILL
EXPANSION PIER CONNECTION
FIXED PIER CONNECTION
SECTION C-C
℄ PIER
℄ 30" ϕ PIPE
SECTION A-A
(BASE PLATE)
℄ PIER OR BENT
SYMMETRIC ABOUT ℄
6" ϕ STEEL DRAIN PIPE (TYP.)
STEEL SUPPORT PLATE (TYP.)
BACKING BAR
1" RADIUS (TYP.)
2½" ϕ CONDUIT HOLE (TYP.) AT PIER 6 AND BENT 4 ONLY
2¾" DIA. HOLE (TYP. 18 PLACES)
SECTION B-B
VARIES 1" MIN TO 6" MAX.
STEEL SUPPORT PLATE (TYP.)
TYPICAL BRIDGE CROSS SECTION
STAINLESS STEEL GUARD RAILS & PAINTED STEEL POST, TYP.
℄ PATH
EDGE OF PAVEMENT
SLOPE VARIES
PG
STEEL RIB
30" ϕ PIPE
SECTION D-D
STAINLESS STEEL GUARD RAIL
STAINLESS STEEL CABLE RAIL SYSTEM
PAINTED STEEL GUARD RAIL POST
PAINTED REMOVABLE STEEL NOSING COVER
LAKEFRONT TRAIL IMPROVEMENT FROM CHICAGO RIVER BRIDGE TO OGDEN SLIP
PIER DETAILS
HNTB
CITY OF CHICAGO
DEPARTMENT OF TRANSPORTATION
BUREAU OF BRIDGES & TRANSIT
03/25/13
N.T.S
5 OF 6



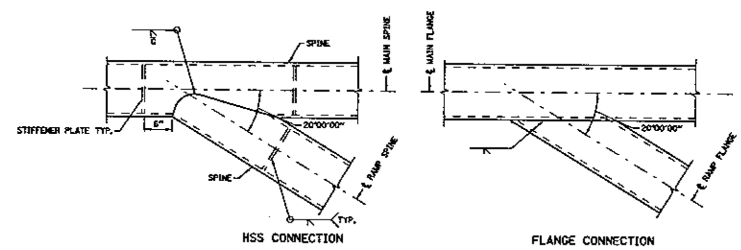
PLAN



PLAN



SECTION A-A



BIFURCATION DETAILS

LAKEFRONT TRAIL IMPROVEMENT FROM CHICAGO RIVER BRIDGE TO OGDEN SLIP

FRAMING PLAN

HNTB

CITY OF CHICAGO

DEPARTMENT OF TRANSPORTATION

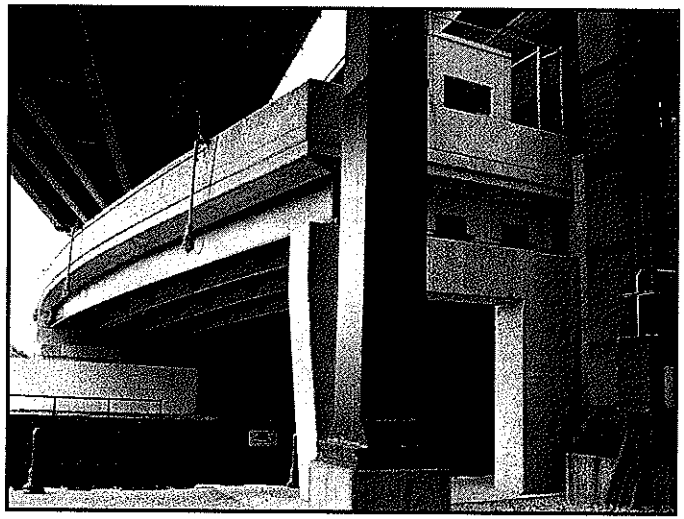
BUREAU OF BRIDGES & TRANSIT

DRAWN	RCB
CHECKED	ML
APPROVED	ML
DATE	03/25/15
SCALE	N.T.S

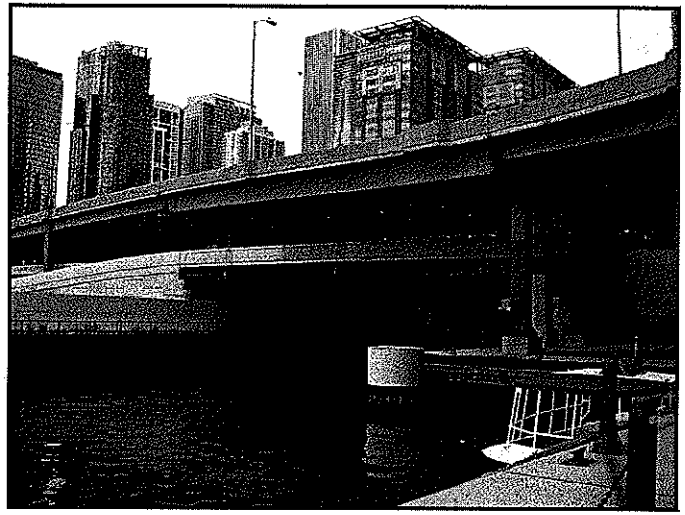
6 OF 6

Site Photographs

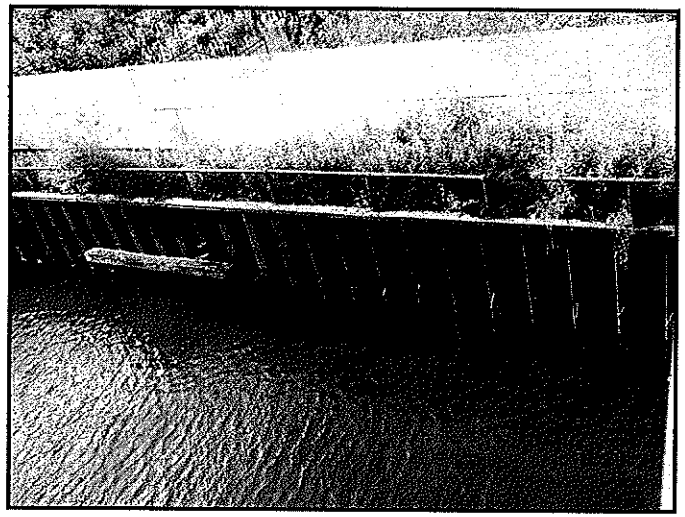
DuSable Park Project Limits Looking North
(Date 05-16-2012)



Exist Ramp over Ogden Slip Looking Southwest
(Date 07-09-2009)

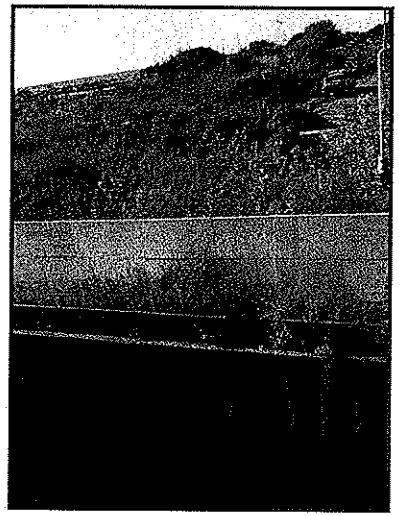


Exist Ramp over Ogden Slip Looking West
(Date 07-09-2009)

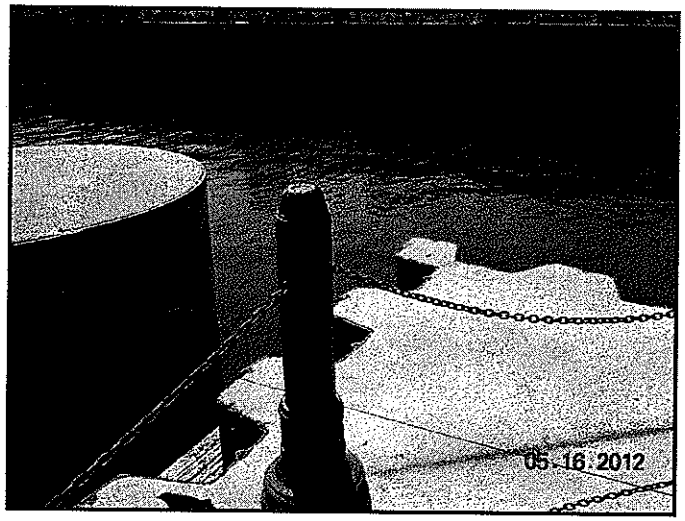


Exist Seawall at South End of Ogden Slip Looking South
(Date 06-13-2012)

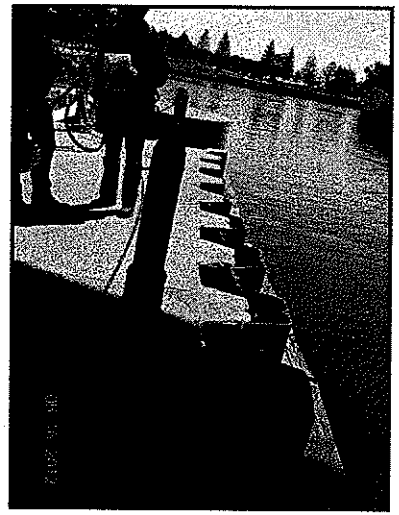
LAKEFRONT TRAIL IMPROVEMENT FROM CHICAGO RIVER BRIDGE TO OGDEN SLIP
COOK COUNTY, CHICAGO ILLINOIS
APPLICATION BY THE CHICAGO DEPARTMENT OF TRANSPORTATION
NOVEMBER 2013



Exist Seawall at South End of Ogden Slip and DuSable Park View Looking South (Date 06-13-2012)



Exist Pile Dolphin at North End of Ogden Slip Looking Southeast (Date 05-16-2012)



Exist Seawall at North End of Ogden Slip Looking East (Date 10-12-2012)

LAKEFRONT TRAIL IMPROVEMENT FROM CHICAGO RIVER BRIDGE TO OGDEN SLIP
COOK COUNTY, CHICAGO ILLINOIS
APPLICATION BY THE CHICAGO DEPARTMENT OF TRANSPORTATION
NOVEMBER 2013

Attachment 4

Endangered Species Act Compliance – Section 7 Documentation

33 West Monroe St, Suite 1825
Chicago, Illinois 60603 U.S.A.
tel: 312-739-1010
fax: 312-739-1015
www.kowalenkogroup.com

KOWALENKO CONSULTING GROUP, INC.
ENVIRONMENT PLANNING MANAGEMENT

November 25, 2013

Ms. Stasi Brown
U.S. Army Corps of Engineers
Chicago District – Regulatory Branch
231 South LaSalle Street, Suite 1500
Chicago Illinois 60604.

Dear Ms. Brown:

Kowalenko Consulting Group, Inc. (KCG) on behalf of the Chicago Department of Transportation (CDOT) and HNTB Corporation, Prime Consultant, has assessed the "U.S. Fish and Wildlife Service (USFWS) Endangered Species Program of the Upper Midwest" website and initiated Section 7 Technical Assistance. As a result of following the online step-by-step instructions for the Section 7(a)(2) consultation process, attached to this letter is the Endangered Species list for Cook County (Attachment 1) and specific Endangered Species fact sheets for species found within Cook County (Attachment 2).

Cross-referencing the Endangered Species fact sheets, which describe the species' habitat, with proposed project site conditions, the following can be concluded:

1. Piping Plover (Charadrius melodus) – Suitable habitat not present in the project area. Therefore, species and critical habitat not present in project area.
2. Mead's Milkweed (Asclepias meadii) – Suitable habitat not present in the project area. Therefore, species and critical habitat not present in project area.
3. Leafy Prairie-Clover (Dalea foliosa) – Suitable habitat not present in the project area. Therefore, species and critical habitat not present in project area.
4. Prairie Bush-Clover (Lespedeza leptostachya) – Suitable habitat not present in the project area. Therefore, species and critical habitat not present in project area.
5. Eastern Prairie Fringed Orchid (Platanthera leucophaea) – Suitable habitat not present in the project area. Therefore, species and critical habitat not present in project area.
6. Hine's Emerald Dragonfly (Somatochlora hineana) – Suitable habitat not present in the project area. Therefore, species and critical habitat not present in project area.
7. Eastern Massasauga Rattlesnake (Sistrurus catenatus catenatus) – Suitable habitat not present in the project area. Therefore, species and critical habitat not present in project area.

Based on these conclusions, the proposed project does not appear to contain endangered species based on guidance provided by the USFWS.

Furthermore, a Natural Resource Review of the project submitted through the Illinois Department of Natural Resources (IDNR) EcoCAT system (Attachment 3) identified the following species that may be present in the project area:

1. Longnose Sucker (Catostomus catostomus)
2. Peregrine Falcon (Falco peregrinus)

IDNR has evaluated this information submitted through EcoCAT and communicated in a letter (Attachment 4) that adverse effects from the project are unlikely.

Should you have any questions, please contact Marco Loureiro, Project Manager, HNTB Corporation, at (312) 803-6516.

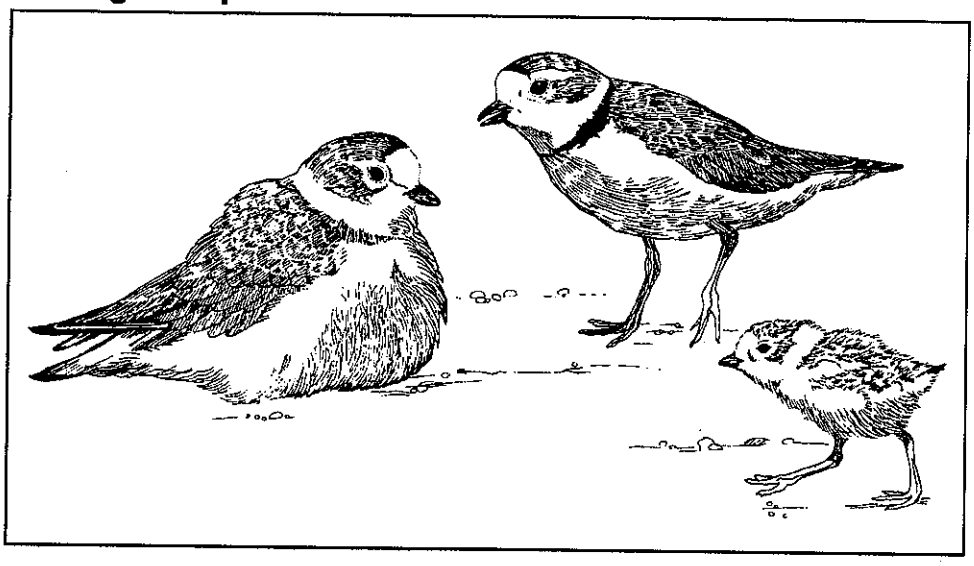
Sincerely,

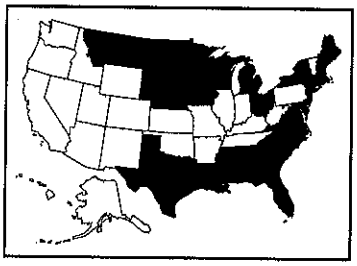
Emma A. Kowalenko
Kowalenko Consulting Group

Cook **Field Office to Contact:** USFWS Chicago Illinois FO 1250 South Grove, Suite 103 Barrington, Illinois 60010 (847) 381-2253 e-mail Chicago@fws.gov Cathy_Pollack@fws.gov	Piping plover *Charadrius melodus*	Endangered	Lakeshore beaches
	Eastern massasauga *(Sistrurus catenatus)*	Candidate	Graminoid dominated plant communities (fens, sedge meadows, peatlands, wet prairies, open woodlands, and shrublands)
	Hine's emerald dragonfly *(Somatochlora hineana)*	Endangered	Spring fed wetlands, wet meadows and marshes
	Hine's emerald dragonfly *(Somatochlora hineana)*	Critical Habitat Designated	Go here for a map and written description of the areas designated as Critical Habitat (PDF)
	Eastern prairie fringed orchid *(Platanthera leucophaea)* Go here for specific guidance on how to determine whether this species is present on a site.	Threatened	Moderate to high quality wetlands, sedge meadow, marsh, and mesic to wet prairie
	Leafy-prairie clover *(Dalea foliosa)*	Endangered	Prairie remnants on thin soil over limestone
	Mead's milkweed *(Asclepias meadii)*	Threatened	Late successional tallgrass prairie, tallgrass prairie converted to hay meadow, and glades or barrens with thin soil
	Prairie bush clover *(Lespedeza leptostachya)*	Threatened	Dry to mesic prairies with gravelly soil

U.S. Fish & Wildlife Service

Endangered Species Facts





States in which the piping plover is found. This map includes both summer and winter locations.

Piping Plover

The piping plover in the Great Lakes area is an *endangered species.* Endangered species are animals and plants that are in danger of becoming extinct. The Northern Great Plains and Atlantic Coast piping plovers are *threatened species.* Threatened species are animals and plants that are likely to become endangered in the foreseeable future. Identifying, protecting, and restoring endangered and threatened species is the primary objective of the U.S. Fish and Wildlife Service's endangered species program.

What is the Piping Plover?

Scientific Name - *Charadrius melodus*

Appearance - These small, stocky shorebirds have a sand-colored upper body, a white underside, and orange legs. During the breeding season, adults have a black forehead, a black breast band, and an orange bill.

Habitat - Piping plovers use wide, flat, open, sandy beaches with very little grass or other vegetation. Nesting territories often include small creeks or wetlands.

Reproduction - The female lays four eggs in its small, shallow nest lined with pebbles or broken shells. Both parents care for the eggs and chicks. When the chicks hatch, they are able to run about and feed themselves within hours.

Feeding Habits - The plovers eat insects, spiders, and crustaceans.

Range - Piping plovers are migratory birds. In the spring and summer they breed in the northern United States and Canada. There are three locations where piping plovers nest in North America: the shorelines of the Great Lakes, the shores of rivers and lakes in the Northern Great Plains, and along the Atlantic Coast. Their nesting range has become smaller over the years, especially in the Great Lakes area. In the fall, plovers migrate south and winter along the Gulf Coast or other southern locations.

The Great Lakes population of the piping plover is at a perilously low level. Since 1983, the number of nesting pairs has ranged from 12 to 32. In 2000, all of the Great Lakes pairs nested in Michigan.

Why is the piping plover endangered?

Habitat Loss or Degradation - Many of the coastal beaches traditionally used by piping plovers for nesting have been lost to commercial, residential, and recreational developments. Through the use of dams or other water control structures, humans are able to raise and lower the water levels of many lakes and rivers of plover inland nest sites. Too much water in the spring floods the plovers' nests. Too little water over a long period of time allows grasses and other vegetation to grow on the prime nesting beaches, making these sites unsuitable for successful nesting.

Nest Disturbance and Predation - Piping plovers are very sensitive to the presence of humans. Too much disturbance causes the parent birds to abandon their nest. People (either on foot or in a vehicle) using the beaches where the birds nest sometimes accidentally crush eggs or young birds. Dogs and cats often harass and kill the birds. Other animals, such as fox, gulls, and crows, prey on the young plovers or eggs.

What is being done to prevent extinction of the piping plover?

Listing - The Great Lakes population of the piping plover was listed as an endangered species in 1986, and the Northern Great Plains and Atlantic Coast populations were listed as threatened species that same year.

Recovery Plans - The U.S. Fish and Wildlife Service developed recovery plans that describe actions that need to be taken to help the bird survive and recover.

Research - Several cooperative research groups have been set up among federal and state agencies, university and private research centers, and the Canadian Wildlife Service. Studies are being conducted to determine where plovers breed and winter, estimate numbers, and monitor long-term changes in populations.

Habitat Protection - Measures to protect the bird's habitat are conducted each year (often by volunteers), including controlling human access to nesting areas, nest monitoring and protection, limiting residential and industrial development, and properly managing water flow. In Michigan, several landowners have formally agreed to protect plover nesting habitat.

Public Education - Many states and private agencies are running successful public information campaigns to raise awareness of the plover's plight. In Michigan, residents of coastal communities where the birds nest have been contacted by an "ambassador" and provided with information about the plight of the plover.

What can I do to prevent the extinction of species?

Learn - Learn more about the piping plover and other endangered and threatened species. Understand how the destruction of habitat leads to loss of endangered and threatened species and our nation's plant and animal diversity. Tell others about what you have learned.

Volunteer - If piping plovers live near you, join the "Plover Patrol" (information about the "Plover Patrol" is on the website to the right). Or volunteer your time at a nearby Nature Center, Wildlife Sanctuary or National Wildlife Refuge. Make sure you control pets, and always remove litter on beaches. Encourage others to do the same.

U.S. Fish & Wildlife Service
1 Federal Drive
Fort Snelling, Minnesota 55111
612/713-5337
http://midwest.fws.gov/eco_serv/endangrd

U.S. Fish & Wildlife Service

Threatened and Endangered Species

Mead's Milkweed

(*Asclepias meadii*)

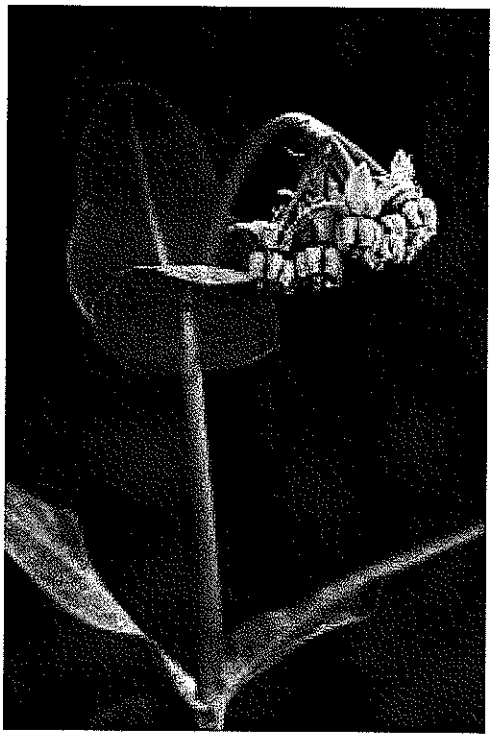
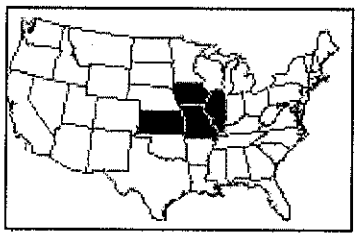


Photo by Mike Redmer

Mead's milkweed is a federally threatened species. Threatened species are animals and plants that are likely to become endangered in the foreseeable future. Endangered species are animals and plants that are in danger of becoming extinct. Identifying, protecting, and restoring endangered and threatened species is the primary objective of the U.S. Fish and Wildlife Service's endangered species program.



Mead's milkweed was extirpated from northern Illinois, Indiana, and Wisconsin.

What is Mead's milkweed?

Mead's milkweed is a long-lived, tallgrass prairie herb belonging to the milkweed family (Asclepiadaceae).

Appearance – Mead's milkweed has a single slender unbranched stalk, 8 to 16 inches high, without hairs but with a whitish waxy covering. The hairless leaves are opposite, broadly ovate, 2 to 3 inches long, 3/8 to 2 inches wide, also with a whitish waxy covering. A solitary umbel (an umbrella-like cluster of flowers) at the top of the stalk has 6 to 15 greenish, cream-colored flowers.

Habitat Requirements – This milkweed requires moderately wet (mesic) to moderately dry (dry mesic) upland tallgrass prairie or glade/barren habitat characterized by vegetation adapted for drought and fire. It persists in stable late-successional prairie.

Life History – Mead's milkweed is a long-lived perennial herb. Studies suggest that it may take 15 years or more to mature from a germinating seed to a flowering plant. After maturing, it can persist indefinitely.

Reproduction – Mead's milkweed flowers as early as late May in the south through mid to late June in the north. It is pollinated by small bumblebees and miner bees. Young green fruit pods appear by late June and reach their maximum length of 1.5 to 4 inches by late August or early September. The hairy seeds within these pods mature by mid-October. Mead's milkweed also spreads vegetatively through underground stems called rhizomes, which strike new roots and stems from their nodes.

What is Mead's milkweed? (cont'd.)

Distribution and Range – This milkweed formerly occurred throughout the eastern tallgrass prairie region of the central United States, from Kansas through Missouri and Illinois and north to southern Iowa and northwest Indiana. It currently is known from 171 sites in 34 counties in eastern Kansas, Missouri, south-central Iowa, and southern Illinois.

Why is the Mead's milkweed threatened?

Habitat Loss – Mead's milkweed is threatened by the destruction and alteration of tallgrass prairie due to farming along with residential and commercial development. Sites known to have Mead's milkweed were destroyed by plowing and land development.

Habitat Fragmentation – Smaller habitat fragments support lower numbers of plants, and thus, fragmentation may hasten or explain the loss of genetic diversity and failure of this plant to sexually reproduce. Populations with low numbers may not attract sufficient numbers or types of pollinators.

Hay Mowing - Most Kansas and Missouri populations occur in prairie hay fields where mowing typically takes place in late June to early July, which removes immature Mead's milkweed fruits and prevents completion of the plant's life cycle.

What is being done to prevent extinction of Mead's milkweed?

Listing – Mead's milkweed was added to the U.S. list of Endangered and Threatened Species on September 1, 1988.

Recovery – A recovery plan* was published on September 16, 2003 which included strategies to increase the numbers and distribution of this plant.

Recovery Plan Strategies – Protect and manage habitat, increase size and number of populations, conduct field surveys for new populations or potential habitat for introduction, conduct research, maintain existing populations, promote public understanding, and review progress.

Reintroductions - Reintroductions are taking place in northern Illinois, Indiana, and Wisconsin. We do not know, yet, if they are successful.

What can I do to help prevent the extinction of species?

Learn – Learn more about the Mead's milkweed and other endangered and threatened species. Understand how the destruction of habitat leads to loss of endangered and threatened species and our nation's plant and animal diversity. Tell others about what you have learned.

Join – Join a conservation group; many have local chapters. Or volunteer at a local nature center, zoo, or wildlife refuge.

Protect - Protect native plants by avoiding non-native invasives, like dame's rocket, in your yard and garden. Remove non-natives, like buckthorn and honeysuckle, that invade your landscaping.

* The Mead's Milkweed Recovery Plan and additional species information can be found at http://midwest.fws.gov/endangered.

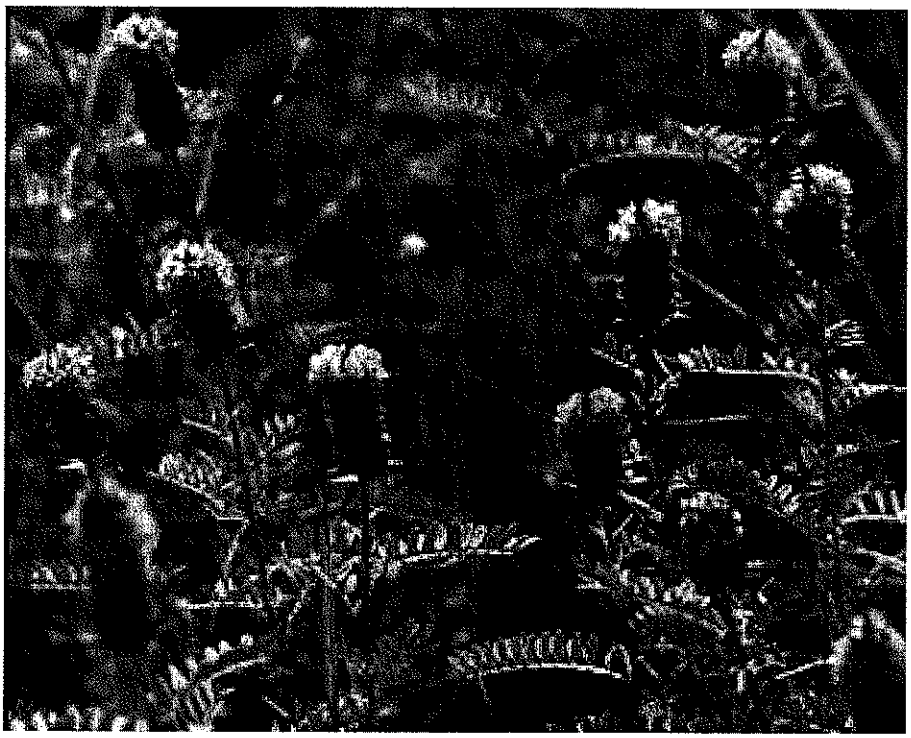
U.S. Fish & Wildlife Service
Endangered Species Division
1 Federal Drive
Fort Snelling, Minnesota 55111-4056
612/713-5350
Federal Relay Service 1-800-877-8339
http://midwest.fws.gov/endangered
June 2005

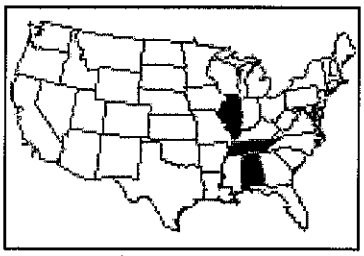
U.S. Fish & Wildlife Service

Threatened and Endangered Species

Leafy Prairie-Clover

(*Dalea foliosa*)





States where the leafy prairie-clover is found.

The leafy prairie-clover is a federally *endangered species*. Endangered species are plants and animals that are in danger of becoming extinct. *Threatened species* are plants and animals that are likely to become endangered in the foreseeable future. Identifying, protecting, and restoring endangered and threatened species is the primary objective of the U.S. Fish and Wildlife Service's endangered species program.

Habitat

This plant is found in prairie remnants along the Des Plains River in Illinois, in thin soils over limestone substrate. In Alabama and Tennessee it lives in prairie-like areas on the edges of cedar glades. It favors sites with a wet spring and fall and a dry summer.

Why It's Threatened

Surviving today at only 14 sites, this clover and its habitat are threatened by land development. Leafy prairie-clover is especially vulnerable to commercial and residential development and to road construction. Other threats include off-road vehicle use and grazing by rabbits and deer.

Fire suppression practices have eliminated the wildfires which once regularly cleared prairie grasslands of the encroaching woods. Now the expansion of shrubs and trees threatens this clover, which needs hot, sunny sites to survive.

U.S. Fish & Wildlife Service
1 Federal Drive
Fort Snelling, Minnesota 55111-4056
612/713-5350
Federal Relay Service 1-800-877-8339
http://midwest.fws.gov/endangered

1997

U.S. Fish & Wildlife Service

Threatened and Endangered Species

Prairie Bush Clover *(Lespedeza leptostachya)*

The prairie bush clover is a threatened species. Threatened species are animals and plants that are likely to become endangered in the foreseeable future. Endangered species are animals and plants that are in danger of becoming extinct. Identifying, protecting, and restoring endangered and threatened species is the primary objective of the U.S. Fish and Wildlife Service's endangered species program.

What is prairie bush clover and where does it occur?

Prairie bush clover (*Lespedeza leptostachya*) is a federally threatened prairie plant found only in the tallgrass prairie region of four midwestern states.

It is a member of the bean family and a midwestern "endemic" – known only from the tallgrass prairie region of the upper Mississippi River Valley.

Why be concerned about prairie bush clover?

Like all native species, prairie bush clover has its own specific niche in the ecosystem and its own unique relationships to other plants and animals with which it lives. The loss of prairie bush clover could result in the disappearance of as yet unknown dependent species such as tiny predatory insects specialized to live on its seeds.

Prairie bush clover possesses a unique genetic and chemical makeup, different from that of any other species. This genetic information has an unknown potential value. For example, cultivated crops such as wheat and corn have been developed and improved by using wild relatives as breeding stock. Prairie bush clover and round headed bush clover (*Lespedeza capitata*) provide the only potential native genetic stock for breeding of cold tolerant bush clovers suitable for the midwest.

Alkaloids from wild plants are used as the active agents in anesthetics, insecticides, anticancer drugs and muscle relaxants. Loss of prairie bush clover would eliminate forever the opportunity for future biological research and the potential for such medical and agricultural benefits.

What does prairie bush clover look like?

Prairie bush clover is a member of the pea family. Also known as slender-leaved bush clover, it has a clover-like leaf comprised of three leaflets about an inch long and a quarter inch wide. Flowering plants are generally between nine and eighteen inches tall with the flowers loosely arranged on an open spike.

The pale pink or cream colored flowers bloom in mid-July. The entire plant has a grayish-silver sheen, making it easy to distinguish from its more round-leaved cultivated relative, the sweet clover (*Melilotus species*). The only closely related bush clover species that is widespread throughout the range of prairie bush clover is the round headed bush clover. This plant is similar in color but more robust, with leaflets about 1-1/2 inches long and 3/8 inches wide and a tight round flowering head. The more southern Virginia bush clover (*Lespedeza virginica*) overlaps the range of prairie bush clover in Illinois. Although it has slender leaves like the prairie bush clover, Virginia bush clover can be distinguished by the fact that its leaves are closer together on the stem and its flowers are the brighter pink.

What laws protect prairie bush clover?

Prairie bush clover was listed as threatened under the Endangered Species Act in February 1987. The Endangered Species Act prohibits the removal or destruction of prairie bush clover on Federal lands or in knowing violation of any state law protecting the species.

Photo by USFWS; Phil Delphey

The showy pink flowers of prairie bush clover are less often seen than the silvery-green pods because of the plant's short blooming season and its ability to produce pods directly from flowers that never open.

In addition to its Federal status, prairie bush clover is listed as endangered or threatened in each of the four states where it occurs.

Specific provisions of state law vary from state to state and can be obtained from the appropriate state contact listed at the end of this fact sheet.

As a general guideline, citizens should contact these agencies before engaging in any action that would alter a population of prairie bush clover, including the removal of plants or

harvest of seeds for research or for commercial sale.

It is not a violation of law for private land owners to continue agricultural activities on their own lands where prairie bush clover occurs. Although heavy summer grazing appears to have an adverse effect on prairie bush clover, populations exposed to light grazing appear to be less affected.

The effect of mowing remains unknown, although the concentration of bush clover in unmown areas of hayland suggests that long term late-summer mowing removes the seeds, thus reducing population size.

Caution should be exerted to assure that herbicides do not affect bush clover populations. Users of herbicides should always be sure to follow label directions and restrictions.

Why is prairie bush clover rare?

Prairie bush clover's rarity is probably best explained by the loss of its tallgrass prairie habitat. At the beginning of the 19th century, native prairie covered almost all of Illinois and Iowa, a third of Minnesota and six percent of Wisconsin. Prairie with moderately damp to dry soils favored by prairie bush clover was also prime cropland; today only scattered remnants of prairie can be found in the four states. Many of today's prairie bush clover populations occur in sites that escaped the plow because they were too steep or rocky.

How is prairie bush clover threatened?

Prairie bush clover is listed as a federally threatened species because it is likely to become endangered with extinction in all or a significant portion of its range. Some of the surviving populations are threatened by conversion of pasture to cropland, overgrazing, agricultural expansion, herbicide application, urban expansion, rock quarrying, and transportation right-of-way maintenance and rerouting; hybridization with the more common round-headed bush clover has also been identified as a potential threat in some areas.

Who knows the location of prairie bush clover populations?

Up-to-date information on the status and location of populations is maintained in computerized databases of the state's Natural Heritage Program and is used for environmental review and conservation planning. A federally-appointed recovery team uses this information to help the U.S. Fish and Wildlife Service plan for the protection of the species and to assess progress toward its recovery.

Information from these databases is available to consulting firms and state agencies preparing environmental assessments of proposed projects.

Where is prairie bush clover protected?

Approximately 40 percent of the known prairie bush clover sites are protected as dedicated state nature preserves, scientific and natural areas and preserves managed by private conservation organizations such as The Nature Conservancy.

A large number of prairie bush clover sites occur on private lands where farmers or other landowners have maintained the species through conservation-minded agricultural practices. Many landowners are proud to have such a rare species on their land and keep the plant in mind when planning agricultural activities. Prairie bush clover persists on lightly grazed prairie pastures, haylands, and prairie remnants that families have maintained for their own enjoyment.

How are prairie bush clover preserves managed?

Prairie bush clover is one of many native prairie species that occur in prairie preserves. Frequent fires historically maintained the composition and treeless structure of the tall-grass prairie. Today's remnants are often invaded by non-native grasses that create a buildup of mulch and by woody species that shade out bush clover populations. For these reasons, natural area managers have reintroduced prescribed fires as a way of maintaining the natural balance of species in the prairie ecosystem and remove invasive woody plants by cutting and spot application of herbicide.

Such fires are carefully planned and controlled by teams of trained managers. Research suggests that although summer fires can be detrimental to emerging prairie bush clover plants, early spring fires are not harmful. Although prescribed burns are an important prairie management tool, burning every year, with no years of rest, may be harmful to prairie bush clover. Annual burns may result in a cover of native warm-season grasses that is too dense.

At times when fire cannot be used to control shrubby invasion, handcutting or haying may be used to maintain the open prairie condition required by prairie bush clover for flowering.

Whom do I contact?

In Illinois Contact:
Illinois Department of Natural Resources
Office of Resource Conservation
One Natural Resources Way
Springfield, IL 62711
(217/782-2685)

U.S. Fish & Wildlife Service
1511 47th Avenue
Moline, IL 61265
(309/757-5800)

In Iowa Contact:
Conservation and Recreation Division
Iowa Department of Natural Resources
502 E 9th St.
Des Moines, IA 50319-0034
(515-281-3891)

U.S. Fish & Wildlife Service
1511 47th Avenue
Moline, IL 61265
(309/757-5800)

In Minnesota Contact:
Minnesota Natural Heritage Program
Department of Natural Resources
Box 7, 500 Lafayette Road
St. Paul, Minnesota 55155
(651/259-5136)

U.S. Fish & Wildlife Service
4101 American Blvd. E.
Bloomington, Minnesota 55425-1665
(612/725-3548)

In Wisconsin Contact:
Bureau of Endangered Resources
Department of Natural Resources
P.O. Box 7921
Madison, Wisconsin 53707
(608/267-5037)

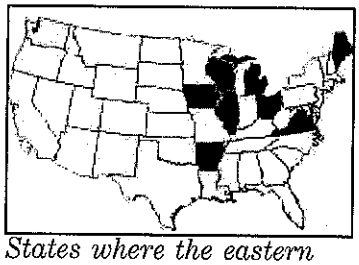
U.S. Fish & Wildlife Service
2061 Scott Tower Drive
New Franken, Wisconsin 54229
(920/866-1717)

U.S. Fish & Wildlife Service

Threatened and Endangered Species

Eastern Prairie Fringed Orchid

(*Platanthera leucophaea*)



States where the eastern prairie fringed orchid is found.

The eastern prairie fringed orchid is a federally threatened species. Threatened species are animals and plants that are likely to become endangered in the foreseeable future. Endangered species are animals and plants that are in danger of becoming extinct. Identifying, protecting, and restoring endangered and threatened species is the primary objective of the U.S. Fish and Wildlife Service's endangered species program.

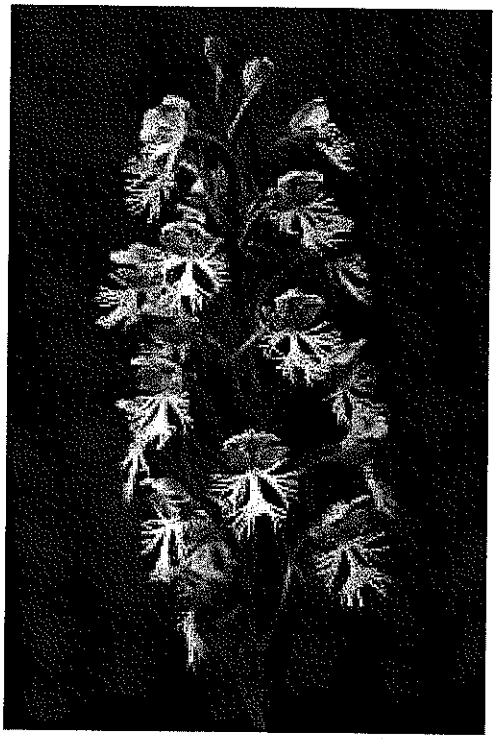


Photo by Mike Redmer

What is the eastern prairie fringed orchid?

The eastern prairie fringed orchid is 1 of at least 200 North American orchid species.

Appearance - This plant is 8 to 40 inches tall and has an upright leafy stem with a flower cluster called an inflorescence. The 3 to 8 inch lance-shaped leaves sheath the stem. Each plant has one single flower spike composed of 5 to 40 creamy white flowers. Each flower has a three-part fringed lip less than 1 inch long and a nectar spur (tube-like structure) which is about 1 to 2 inches long.

Habitat Requirements - The eastern prairie fringed orchid occurs in a wide variety of habitats, from mesic prairie to wetlands such as sedge meadows, marsh edges, even bogs. It requires full sun for optimum growth and flowering and a grassy habitat with little or no woody encroachment. A symbiotic relationship between the seed and soil fungi, called mycorrhizae, is necessary for seedlings to become established. This fungi helps the seeds assimilate nutrients in the soil.

Life History - This orchid is a perennial herb that grows from an underground tuber. Flowering begins from late June to early July, and lasts for 7 to 10 days. Blossoms often rise just above the height of the surrounding grasses and sedges. The more exposed flower clusters are more likely to be visited by the hawkmoth pollinators, though they are also at greater risk of being eaten by deer. Seed capsules mature over the growing season and are dispersed by the wind from late August through September.

What is the eastern prairie fringed orchid? (cont'd.)

Reproduction/Pollination - Night flying hawkmoths pollinate the nocturnally fragrant flowers of this white orchid. Visiting hawkmoths inadvertantly collect pollen on their proboscises as they ingest nectar from the flower's long nectar spurs.

Why is the eastern prairie fringed orchid threatened?

Historic Decline - Early decline was due to the loss of habitat, mainly conversion of natural habitats to cropland and pasture.

Current Decline - Current decline is mainly due to the loss of habitat from the drainage and development of wetlands. Other reasons for the current decline include succession to woody vegetation, competition from non-native species and over-collection.

What is being done to prevent extinction of the eastern prairie fringed orchid?

Listing - The eastern prairie fringed orchid was added to the U.S. List of Endangered and Threatened Species on September 28, 1989 which benefits the species by focusing attention and money on its conservation.

Recovery Plan - In September 1999 a recovery plan was completed by the U.S. Fish and Wildlife Service which delineates reasonable actions needed to recover and/or protect this orchid. The purpose of the plan is to promote the conservation of the threatened eastern prairie fringed orchid by implementing identified tasks.

Recovery Plan Actions - Protect habitat, manage habitat, increase size and numbers of populations, conduct surveys on known populations, conduct research, and review progress.

What can I do to help prevent the extinction of species?

Learn- Learn more about the eastern prairie fringed orchid and other endangered and threatened species. Understand how the destruction of habitat leads to loss of endangered and threatened species and our nation's plant and animal diversity. Tell others about what you have learned.

Join – Join a conservation group; many have local chapters. Volunteer at a known orchid site to help with annual demographic data collection or to help with prescribed burns at these sites. Or volunteer at a local nature center, zoo, or wildlife refuge.

Protect – Protect remaining wetland areas by **not** filling them for residential or commercial development. Protect native plant species: do not plant non-native invasive plant species in your gardens or landscape projects. Protect water quality by minimizing use of lawn chemicals (i.e., fertilizers, herbicides, and insecticides), recycling used car oil, and properly disposing of paint and other toxic household projects.

The Eastern Prairie Fringed Orchid Recovery Plan and additional species information can be found at http://midwest.fws.gov/endangered. **Copies of the recovery plan may be purchased by contacting the** Fish and Wildlife Reference Service at 5430 Grosvenor Lane, Suite 110, Bethesda, Maryland 20814, or by phone 1-800-582-3421 or 301-492-6403 or on the Internet at http://fa.r9.fws.gov/r9fwrs/.

U.S. Fish & Wildlife Service
Chicago Illinois Field Office
1250 South Grove St., Ste. 103
Barrington, Illinois
847-381-2253
Federal Relay Service 1-800-877-8339
http://midwest.fws.gov/Chicago
2005

(6) Illinois Units 1 through 7, Cook, DuPage, and Will Counties, Illinois.

(i) Illinois Unit 1: Will County. Located in T36N, R10E, Sec. 22, Sec. 27, SE¼ NE¼ Sec. 28, NE¼ SE¼ Sec. 28, NW¼ NW¼ Sec. 34 of the Joliet 7.5′ USGS topographic quadrangle. Land south of Illinois State Route 7, east of Illinois State Route 53, and west of the Des Plaines River.

(ii) Illinois Unit 2: Will County. Located in T36N, R10E, Sec. 3, NW¼ E½ Sec. 10, E½ Sec. 15 of the Romeoville and Joliet 7.5′ USGS topographic quadrangles. Land east of Illinois State Route 53, and west of the Des Plaines River.

(iii) Illinois Unit 3: Will County. Located in T37N, R10E, SW¼ Sec. 26, NW¼ SE¼ Sec. 26, E½ Sec. 34, W½ NW¼ Sec. 35 of the Romeoville 7.5′ USGS topographic quadrangle. Land west and north of the Des Plaines River and north of East Romeoville Road.

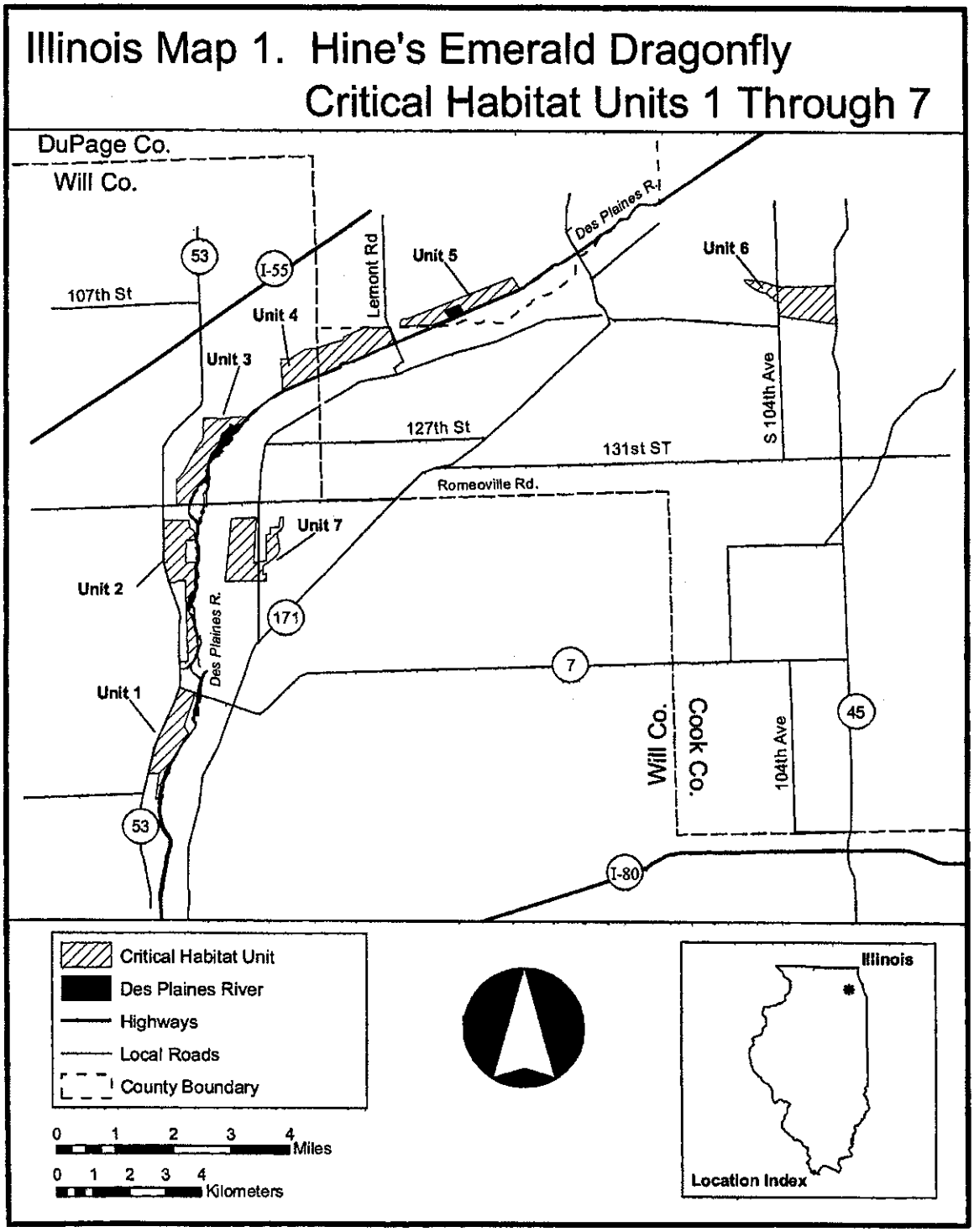
(iv) Illinois Unit 4: Will and Cook Counties. Located in T37N, R10E, S½ NE¼ Sec. 24, W½ SW¼ Sec. 24, SE¼ Sec. 24 and T37N, R11E, SW¼ SW¼ Sec. 17, Sec. 19, NW¼ Sec. 20 of the Romeoville 7.5′ USGS topographic quadrangle. Land to the south of Bluff Road, west of Lemont Road, and north of the Des Plaines River.

(v) Illinois Unit 5: DuPage County. Located in T37N, R11E, NW¼ Sec. 15, NW¼ SW¼ Sec. 15, S½ NE¼ Sec. 16, SW¼ Sec. 16, N½ SE¼ Sec. 16, SE¼ Sec. 17 of the Sag Bridge 7.5′ USGS topographic quadrangle. Land to the north of the Des Plaines River.

(vi) Illinois Unit 6: Cook County. Located in T37N, R12E, S½ Sec. 16, S½ NE¼ Sec. 17, N½ SE¼ Sec. 17, N½ Sec. 21 of the Sag Bridge and Palos Park 7.5′ USGS topographic quadrangles. Land to the north of the Calumet Sag Channel, south of 107th Street, and east of U.S. Route 45.

(vii) Illinois Unit 7: Will County. Located in T36N, R10E, W½ Sec. 1, Sec. 2, N½ Sec. 11 of the Romeoville and Joliet 7.5′; USGS topographic quadrangles. Land east of the Illinois and Michigan Canal.

(viii) Note: Map of Illinois critical habitat Units 1 through 7 (Illinois Map 1) follows:

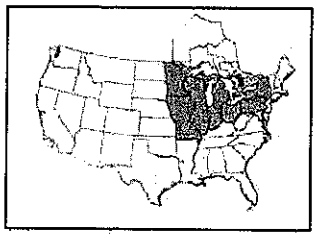


(7) Michigan Unit 3, Mackinac County, Michigan.

(i) Michigan Unit 3: Mackinac County. Located on the east end of Bois Blanc Island. Bois Blanc Island has not adopted an addressing system using the public land survey system. The unit is located in Government Lots 25 and 26 of the Cheboygan and McRae Bay 7.5′; USGS topographic quadrangles. The unit extends from approximately Walker's Point south to Rosie Point on the west side of Bob-Lo Drive. It extends from the road approximately 328 ft (100 m) to the west.

(ii) Note: Map of Michigan critical habitat Unit 3 (Michigan Map 1) follows:

U.S. Fish & Wildlife Service



The eastern massasauga is generally found in small, isolated populations throughout its range.

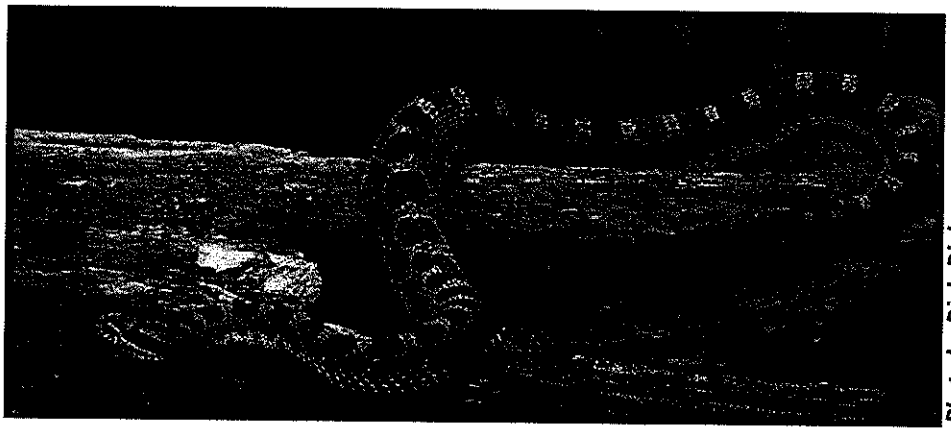


Photo by Dick Dickensen

Eastern Massasauga Rattlesnake

The eastern massasauga rattlesnake (*Sistrurus catenatus catenatus)* is a Federal candidate species. Candidate species are those species for which the Service has sufficient information on their biological status and threats to propose them as endangered or threatnened. Candidate species receive no legal protection, however, conservation is encouraged since they may warrant future protection under the Endangered Species Act.

What is an eastern massasauga rattlesnake?

Appearance - Massasaugas are small snakes with thick bodies, heart-shaped heads and vertical pupils. The average length of an adult is about 2 feet. Adult massasaugas are gray or light brown with large, light-edged chocolate brown blotches on the back and smaller blotches on the sides. The snake's belly is marbled dark gray or black and there is a narrow, white stripe on its head. Its tail has several dark brown rings and is tipped by gray-yellow horny rattles. Young snakes have the same markings, but are more vividly colored. The head is a triangular shape and the pupils are vertical.

Massasaugas are docile, secretive snakes that will try to escape rather than fight. But they will protect themselves and may bite if cornered. Be cautious in massasauga areas by wearing leather boots or shoes, watching where you place your hands and feet and walking around, rather than over, fallen logs. Treat massasaugas with respect, like any wild animal. If you are bitten by a massasauga, seek medical help immediately.

Habitat - Massasaugas live in wet areas including wet prairies, marshes and low areas along rivers and lakes. In many areas massasaugas also use adjacent uplands during part of the year. They often hibernate in crayfish burrows but they may also be found under logs and tree roots or in small mammal burrows. Unlike other rattlesnakes, massasaugas hibernate alone.

Reproduction - Like all rattlesnakes, massasaugas bear live young. The young actually hatch from eggs while still in the female's body. Depending on the health of the individual, adult females may bear young every year or every other year. When food is especially scarce they may only have young every three years. Massasaugas that have young every year, mate in the spring and bear their young in late summer or early fall. In contrast, snakes that have young every other year, mate in autumn and bear young the next summer. Litter size varies from 5 to 19 young.

Feeding Habits - Massasaugas eat small rodents like mice and voles but they will sometimes eat frogs and other snakes. They hunt by sitting and waiting. Heat sensitive pits near the snakes' eyes alert the snake to the presence of prey. They can find their prey by sight, by feeling vibrations, by sensing heat given off by their prey, and/or by detecting chemicals given off by the animal (like odors).

What is an eastern massasauga rattlesnake? (cont'd.)

Range - Eastern massasaugas live in an area that extends from western New York and southern Ontario to southern Iowa and a narrow band in northeastern Missouri. Historically, the snake's range covered this same area, but within this large area the number of populations and the number of snakes within populations have steadily shrunk. Today, the massasauga is listed as endangered, threatened, or a species of concern in every state and province in which it lives.

Why is the eastern massasauga a candidate species?

Eradication - People seem to have an innate fear of snakes and fear of poisonous snakes is particularly strong. Therefore, not only are massasaugas killed when they show up near homes or businesses, but people may go out of their way to kill or even eliminate them. Indeed, many states had bounties on all rattlesnakes, including massasaugas.

Habitat loss - Massasaugas depend on wetlands for food and shelter but often use nearby upland areas during part of the year. Draining wetlands for farms, roads, homes, and urban development has eliminated much of the massasauga habitat in many states. Also, massasaugas are not long distance travelers, so roads, towns, and farm fields prevent them from moving between the wetland and upland habitats they need. These same barriers also separate and isolate remaining populations from each other. Small, isolated populations often continue on a downward spiral until the massasauga is lost from those areas.

What is being done to conserve the eastern massasauga?

Research - Researchers are studying the eastern massasauga to learn about its life history, about how it uses its habitat, and how we can manage for it and its habitat.

Habitat Management - Many of the remaining populations of massasaugas are on public land and privately owned natural areas. Some land management practices on those properties harm massasaugas. The Service is working with willing land managers to practice techniques that allow traditional management goals to continue but avoid harming the massasauga and its habitat.

Education - Although many people have an innate fear of massasaugas, it is actually a secretive, docile snake that strikes humans only when it feels threatened and cornered. Living, working, or recreating in massasauga areas does require caution, but the massasauga is also an important and beautiful part of the natural heritage of those areas. We hope that education about the docile nature of the snake, its habits, and its role in the ecosystem will help people feel more comfortable living with this rare creature.

Why do we want to conserve the eastern massasauga?

Ecosystem Role - The massasauga plays an important role in its ecosystems, both as a predator on small mammals, other snakes, and amphibians and as prey for hawks, owls, cranes, and some mammals.

Indicator Species - The fact that massasaugas are in serious decline is a warning bell telling us that something is wrong. The story of the massasauga is similar to the story of many species of plants and animals that need wetlands and/or a combination of wetlands and uplands to survive. When we drain wetlands and develop in natural areas, we push our wild plants and animals onto ever smaller isolated islands of habitat where it is difficult for them to survive. By conserving massasaugas, we conserve natural systems that support many species of plants and animals.

U.S. Fish & Wildlife Service
1 Federal Drive
Fort Snelling, Minnesota 55111-4056
612/713-5350
http://midwest.fws.gov/endangered

October 1999

EcoCAT
Ecological Compliance Assessment Tool

Applicant:	City of Chicago Department of Transportation	*IDNR Project #:*	1207299
Contact:	Janet Attarian	Alternate #:	1002427
Address:	30 N LaSalle Street Suite 1100 Chicago, IL 60602	Date:	01/19/2012

Project: Lakefront Trail Improvement
Address: 500 East Grand Avenue, Chicago

Description: The City of Chicago and the Chicago Park district are planning to construct a bycycle path and structure adjacent to Lake Shore Drive between OgdenSlip and Jane Addams Park. The new structure will eventually connect to adjacent Lakefront Trail path.

Natural Resource Review Results

Consultation for Endangered Species Protection and Natural Areas Preservation (Part 1075)
The Illinois Natural Heritage Database shows the following protected resources may be in the vicinity of the project location:

Longnose Sucker *(Catostomus catostomus)*
Peregrine Falcon *(Falco peregrinus)*

Wetland Review (Part 1090)
The National Wetlands Inventory shows wetlands within 250 feet of the project location.

An IDNR staff member will evaluate this information and contact you within 30 days to request additional information or to terminate consultation if adverse effects are unlikely.

Location
The applicant is responsible for the accuracy of the location submitted for the project.

County: Cook
Township, Range, Section:
39N, 14E, 10

IL Department of Natural Resources Contact
Rick Pietruszka
217-785-5500
Division of Ecosystems & Environment

Local or State Government Jurisdiction
City of chicago Department Transportation
Janet Attarian
30 North LaSalle Street, Floor 5
Chicago, Illinois 60602-2503

Disclaimer

The Illinois Natural Heritage Database cannot provide a conclusive statement on the presence, absence, or condition of natural resources in Illinois. This review reflects the information existing in the Database at the time of this inquiry, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, compliance with applicable statutes and regulations is required.

Terms of Use

By using this website, you acknowledge that you have read and agree to these terms. These terms may be revised by IDNR as necessary. If you continue to use the EcoCAT application after we post changes to these terms, it will mean that you accept such changes. If at any time you do not accept the Terms of Use, you may not continue to use the website.

1. The IDNR EcoCAT website was developed so that units of local government, state agencies and the public could request information or begin natural resource consultations on-line for the Illinois Endangered Species Protection Act, Illinois Natural Areas Preservation Act, and Illinois Interagency Wetland Policy Act. EcoCAT uses databases, Geographic Information System mapping, and a set of programmed decision rules to determine if proposed actions are in the vicinity of protected natural resources. By indicating your agreement to the Terms of Use for this application, you warrant that you will not use this web site for any other purpose.

2. Unauthorized attempts to upload, download, or change information on this website are strictly prohibited and may be punishable under the Computer Fraud and Abuse Act of 1986 and/or the National Information Infrastructure Protection Act.

3. IDNR reserves the right to enhance, modify, alter, or suspend the website at any time without notice, or to terminate or restrict access.

Security

EcoCAT operates on a state of Illinois computer system. We may use software to monitor traffic and to identify unauthorized attempts to upload, download, or change information, to cause harm or otherwise to damage this site. Unauthorized attempts to upload, download, or change information on this server is strictly prohibited by law. Unauthorized use, tampering with or modification of this system, including supporting hardware or software, may subject the violator to criminal and civil penalties. In the event of unauthorized intrusion, all relevant information regarding possible violation of law may be provided to law enforcement officials.

Privacy

EcoCAT generates a public record subject to disclosure under the Freedom of Information Act. Otherwise, IDNR uses the information submitted to EcoCAT solely for internal tracking purposes.

Illinois Department of
Natural Resources
One Natural Resources Way Springfield, Illinois 62702-1271
http://dnr.state.il.us

Pat Quinn, Governor
Marc Miller, Director

January 20, 2012

Janet Attarian
City of Chicago Department of Transportation
30 N LaSalle Street
Suite 1100
Chicago, IL 60602 2570

Re: Lakefront Trail Improvement
Project Number(s): 1207299 [1002427]
County: Cook

Dear Applicant:

This letter is in reference to the project you recently submitted for consultation. The natural resource review provided by EcoCAT identified protected resources that may be in the vicinity of the proposed action. The Department has evaluated this information and concluded that adverse effects are unlikely. Therefore, consultation under 17 Ill. Adm. Code Part 1075 and 1090 is terminated.

Consultation for Part 1075 is valid for two years unless new information becomes available that was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the project has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary. Consultation for Part 1090 (Interagency Wetland Policy Act) is valid for three years.

The natural resource review reflects the information existing in the Illinois Natural Heritage Database and the Illinois Wetlands Inventory at the time of the project submittal, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, you must comply with the applicable statutes and regulations. Also, note that termination does not imply IDNR's authorization or endorsement of the proposed action.

Please contact me if you have questions regarding this review.

Rick Pietruszka RP
Division of Ecosystems and Environment
217-785-5500

Printed on recycled and recyclable paper